





THE
GEOGRAPHICAL CATECHISM

OF
Pennsylvania, and the Western States;

DESIGNED AS A
GUIDE AND POCKET COMPANION,
FOR
Travellers and Emigrants,

TO
**PENNSYLVANIA, OHIO, INDIANA, ILLINOIS,
MICHIGAN AND MISSOURI;**

CONTAINING
A GEOGRAPHICAL AND EARLY HISTORICAL ACCOUNT OF THESE
SEVERAL STATES, FROM THEIR FIRST SETTLEMENT
UP TO THE PRESENT TIME.

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Teacher and Translator.

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PREFACE.

THAT a work like the present is useful and important needs no proof. The author has long been impressed that a *Geographical Catechism of Pennsylvania and of the Western States*, would be very acceptable and useful; and has, at the solicitation of some of his friends, (who knew that he had travelled considerably in the "*Far West*" some six years ago, and collected much geographical knowledge by making personal observations and enquiries from those who resided for years in the *several western states*,) compiled this work. When he was in the *west*, in 1829 and 1830, he took accurate notes; however, on consulting these *now*, though correct at the time when taken, and comparing them with works recently published, he found they were of little use—much like a garment made for a young and *growing* giant, "*two short and not long enough*," after a few year's growth; for the changes since that time have been both rapid and wide. Hence in presenting this book, it cannot be expected that he should be so presumptuous as to claim general originality, though he claims accuracy; for he can assure the public that he has used every exertion to have the work correct by comparing it with the latest publications.

In compiling this work the author had before him Darby's and Dwights' Gazetteer of the United States; Davenport's Gazetteer; Gordan's Gazetteer of Pennsylvania; Hazzard's Register; Mrs. Eaton's Geography of Pennsylvania; Flint's Geography; Goodrick's Geography; Com-

mercial Atlas; Mitchell's and Himnan's Guide and Compendium of Canals and Railroads; Kilbourn's Gazetteer of Ohio; Illinois Gazetteer and Emigrants' Guide by J. M. Peck, A. M. Willet's and Dana's Sketches of the West.

As to the plan of the work, the descriptions of each state and the statistical facts, &c., are arranged under two general heads; *Physical Geography* and *Political Geography*.

The first comprising a description of the boundaries, square miles, acres, mountains, valleys, rivers, harbors, bays, soil, surface, geology, minerals, mineral and medical springs, caves, natural curiosities, productions, climate, &c.

The second gives a synopsis of the constitution of each of the states described, population, divisions into counties alphabetically arranged, chief towns, internal improvements, viz: bridges, turnpikes, canals and railroads; agriculture, commerce, manufactures, education, colleges, academies, common schools, lyceums, religion, maintenance of the poor, penitentiary system, banks, revenue, early history, principal stage routes, &c.

To avoid the usual marks of quotation, let it suffice to say; that he has availed himself of the above named works, especially *Flint's and Peck's works*—often used the very words of others when they fully expressed his views better than he could have hoped to express them himself.

How far the Author has succeeded in his attempts to render this work useful and acceptable, he can with cheerfulness rely upon the enlightened candor of the public.

Those who desire more extensive information, can profitably consult the works cited; particularly Flint and Peck on the West.

I. D. R.

*Refuge, near Mechanicsburg,
Cumberland County, Pa.*

PENNSYLVANIA.

Q. Whence is the name Pennsylvania derived?

A. It is derived from the surname of William Penn, and *sylva*, woods; and means, literally, *Penn's woods*. This was a very appropriate name; for few, if any regions of equal extent, and in one continuous body, ever bore, in a state of nature, a more dense forest.

Q. How is Pennsylvania bounded?

A. The northwestern corner, for the distance of 39 miles, is bounded by lake Erie, and north by New York, for a distance of 230 miles; the Delaware river separating it from New York and New Jersey, bounds it on the east 230 miles; from the Delaware river, by a circular line, around New Castle county, Delaware, to the N. E. limits of Maryland, 24 miles; on the S. by Maryland and by Virginia 69 miles; and on the west by the Ohio river, 64 miles; and by the state of New York, lake Erie, 91 miles; having an entire outline of

Q. What is the shape of Pennsylvania?

A. It is almost a perfect parallelogram; three of its sides being marked by parallels of latitude and a meridian. It extends from latitude 39 deg. 43 min. to 43 deg. 16 min. north, and from 2 deg. 20 min. east, to 3 deg. 36 min. west from Washington. Its greatest length is 315 miles; greatest breadth 176; general breadth 153.

Q. What is its area ?

A. The area of it has been variously stated. Some geographers state 43,950 square miles, others 46,000 square miles. But by comparing the best maps, and from calculating the rhombs, and parts occupied by the State, it includes above 47,000 square miles.

Q. How many acres does it contain ?

A. According to the most accurate calculations, it contains thirty millions and eighty thousand acres.

Q. What are the names of the principal mountains ?

A. The South mountain, the Blue mountain, the Kittatinny, the Cove mountain, Sideling Hill, Allegheny, Laurel Ridge, Chesnut Ridge, Rugged mountains, Great Warrior's mountain, East Will's mountain, Jack's mountain, &c., &c.

Q. What is the peculiar mountainic aspect of Pennsylvania ?

A. Pennsylvania has a very peculiar aspect to itself on account of the structure and position of its mountains which greatly modify the features of the state.

Q. Can you describe the principal mountains and their ranges ?

A. " Without attending to very minute descriptions, the mountains are as follow :

" Though omitted in most maps, a chain enters the south boundary of York county, and cut by the Susquehanna river, rises in, and traverses Lancaster county between Pequea and Octorara creeks ; and between the sources of the Conestoga and Brandywine ; separates for a short distance Lancaster and Chester, and is penetrated by the Schuylkill above Pottstown. Rising again, and stretching northeast, it forms first the boundary between Montgomery and Berks ; thence between Lehigh and Bucks, and, separating Northampton from Bucks, reaches the Delaware.

Northwest from, and nearly parallel to, the preceding chain, another very remarkable ridge traverses New Jersey and Pennsylvania; and, similar to the former, the latter is unknown in either of these states by any general name. Its continuation in New York, is designated by that of Shawangunk. Between the Susquehanna and Potomac, it is termed relatively the South Mountain, and in Virginia and the Carolinas, it forms the Blue Ridge; and, entering the northeast part of Georgia, is gradually lost among the sources of Chatahooche river.

After Mr. Darby, we have adopted or extended the name Blue Ridge into Pennsylvania. This remarkable chain enters the state on its southern line, and stretching north between Adams and Franklin counties, reaches the southern angle of Cumberland, where it turns to northeast, and extending towards the Susquehanna, separates Cumberland from Adams and York counties. About six miles below Harrisburg, it is pierced or broken down by the Susquehanna river; again rising below the mouth of the Swatara, it crosses the southern angle of Dauphin; thence known as the Conewago hills, separates Lebanon from Lancaster county, enters Berks, and reaches the Schuylkill at Reading. Continuing through Berks, Lehigh, and Northampton counties, passes Allentown, Bethlehem, and Easton, where it is interrupted by the Delaware below the latter town.

The third, and, in some respects, the most remarkable chain of Pennsylvania, is the Kittatinny. Known by divers local names, this mountain, in a survey, advancing from southeast to northeast, first rises distinctly in Franklin county, and like other chains in the southern margin of the state, ranges a little east of north; but bending more to the northeast extends to the Susquehanna, separating Cumberland and Perry counties. Five miles above Harrisburg, the Kittatinny is interrupted by the Susque-

hanna river. Broken, also, by the Swatara, the Schuylkill, the Lehigh, and the Delaware, it enters New Jersey. The general aspect of the Kittatinny is much more continuous than that of any other mountain chain of Pennsylvania. It is, however, very far from being uniform in elevation, varying from 800 to perhaps 1500 feet above tide water.

Northwest from Kittatinny, though more elevated, the chains are much less distinctly defined. Between the Kittatinny mountain, and the north branch of the Susquehanna river, the intermediate country is in a great part composed of high, rugged mountains, and narrow, deep, precipitous valleys. This is the most sterile and least improvable part of Pennsylvania; but it is the region producing the most immense masses of anthracite coal known on the globe.

The confusion in the natural arrangement of the anthracite section of Pennsylvania, is more apparent than real. The Kittatinny mountain and the north branch of the Susquehanna lie nearly parallel upwards of 70 miles, distant from each other about 35 miles. The intervening space is filled by lateral chains, rising in many places, far above any part of the Kittatinny. Among these, two are worthy of particular notice, and serve pre-eminently to elucidate the very peculiar topography of interior Pennsylvania.

Bedford and Franklin counties are separated by a chain here known as the Cove mountain. With a change of name to Tuscarora mountain, the latter chain separates Franklin from Huntingdon, and Perry from Mifflin, and reaches the Susquehanna nearly opposite the southern extremity of Northumberland county. Rising again below the Mahantango river, and broken into vast links, the chain divides into nearly equal parts the space between the Kittatinny mountains and the main branch of the Susquehanna river. Broad mountain, passed on the road from

Easton and Bethlehem to Berwick, is one of the great links of this central chain.

More accurate surveys would, it is supposed, identify Sideling hill, of Bedford county, Jack's mountain, of Huntingdon and Mifflin, and the central chain of Union, Columbia, and Luzerne counties.

The chain which rises on both banks of the north branch of the Susquehanna, in Luzerne, is amongst the most interesting features, not only of the United States, but of the world. Below Sunbury a chain commences and is continued up the Susquehanna along its left shore, which is divided by the river above Danville, and again above Catawissa. From the latter place it stretches north-east through Columbia, and enters Luzerne by the name of Nescopeck mountain, mingles with other chains, and terminates in the southern part of Wayne county. Nearly parallel to the Nescopeck, another chain leaves the north branch of the Susquehanna, 16 miles below Wilkesbarre. Skirting the left bank about eight miles, it is again crossed by the river, and continuing its course N. E. passes about two miles from, and opposite Wilkesbarre. Preserving this course, it is for the third and last time crossed by the Susquehanna above the mouth of Lackawannock creek, ten miles above Wilkesbarre, and stretching towards the Delaware is lost in Wayne county. Beyond the main branch of the Susquehanna, to the N.W., the chains lie nearly parallel to those S. E. from the river. The construction of the country on both sides of the Susquehanna is nearly the same.

To the eye, the region included between the west branch of the Susquehanna and the Potomac, bears a strong analogy to that between the west and north branches of the Susquehanna, but a minute scrutiny exposes great changes, advancing S.W., towards the borders of Maryland. Soil and vegetation both differ ma-

terially. The beech, hemlock, and sugar-maple forests, are succeeded in the valleys by oak, hickory, and elm. Thus far the entire drain of Pennsylvania is into the Atlantic ocean. The chain called "Allegheny" forms, in the southern part of the state, the dividing ridge between the Atlantic slope and Ohio valley; and has probably from this circumstance received its pre-eminence amongst the mountain chains of Pennsylvania, Maryland, and Virginia. Only about sixty miles of its range in the former state, however, does separate the sources of the streams of the two great natural sections, the Atlantic slope and Ohio valley. The Allegheny chain, leaving Allegheny county in Maryland, separates Bedford and Somerset counties, and extending in a northerly direction, also separates the northwest part of Bedford, from the southeast part of Cambria county. At the extreme northern angle of Bedford, the mountain turns to the northeast, and is thence drained on both sides by the tributary streams of the Susquehanna. Discharging the waters of the west branch to the northwest, and those of the Juniata and Bald Eagle rivers to the southeast; the Allegheny reaches the west branch of the Susquehanna at the mouth of the Bald Eagle river.

What may be the elevation of its summit, the base of the Allegheny chain between Bedford and Somerset, and Cambria counties, constitutes the height of land between the Ohio river and Atlantic tides; and form also a similar demarcation in Maryland.

As a mountain chain, it yields in grandeur of scenery and in elevation above its base not only to the Broad mountain, but to many other chains of the Appalachian system.

Chesnut Ridge is the next chain west of the Allegheny; the two chains extending nearly parallel, and about twenty miles asunder. Though not of the greatest elevation, this is one of the most extended chains of the system to

which it appertains; reaching by various local names over Virginia into Tennessee, and most probably into Alabama. As placed on our maps, it enters Pennaylvania at the northwest angle of Maryland, and ranging a little east of north forms the boundary between Fayette and Somerset; thence between Westmoreland and Somerset, and finally between the northeast angle of Westmoreland and southwest of Cambria county. At the extreme northeast angle of Westmoreland, this ridge reaches the Kiskiminitas river, and as delineated, its termination. So far from being so in nature, this chain preserves its identity through the state further north than any other chain of the system.

Laurel Hill is the last chain of the system in Pennsylvania. What has already been observed respecting the height of the chains nearest the Atlantic ocean, may be repeated in relation to the Chesnut Ridge and Laurel Hill that though not very elevated, they nevertheless exist as well defined mountain chains. The latter is a very extended branch of the system reaching from the northern part of Pennsylvania in Alabama. Similar to Chesnut Ridge, Laurel Hill is terminated on our maps near the Kiskiminitas, though in reality extending to near the south boundary of New York.

In addition to the great chains we have been surveying, many of minor importance might be noted; but we have deemed a view of the most striking parts sufficient. If engrouped into one view the mountains of Pennsylvania exhibit many interesting points of observation. The Appalachian system is here upwards of 150 miles wide. The particular chains do not average more than three miles, if so much, in breadth.

Q. What area do these mountains cover?

A. According to the most accurate estimation, it is supposed that the bases of the mountains of Pennsylvania

cover about 6,750 square miles, or nearly the one-seventh of the superficies of the state.

Q. What is the general appearance of the valleys ?

A. The valleys are generally irregular, especially those of the Susquehanna and its branches, which traverse the whole width of the Appalachian chain of mountains, some times flowing in wide valleys between parallel ranges, for 50 and 60 miles in a pretty direct course, and at other times breaking through the mountain ridges. The valleys between the different ranges vary greatly, from 5 to 10, 20 and 40 miles, the latter generally with a hilly or broken surface.

Q. Can you name the principal rivers which drain this state ?

A. The State is drained by the Delaware, Susquehanna, Ohio, Potomac, and Genessee, and the extreme N. West angle by lake Erie.

NOTE.—The following tables give the respective area of each, and also the smaller sections of the Potomac, Genessee and Erie.

Delaware river drains the counties of

	Square Miles.	Acres.
Berks, - - -	950	603,000
Bucks, - - -	640	409,600
Chester 3-4 - -	550	352,000
Deaware, - - -	180	115,200
Lebanon 1-8 - -	40	25,600
Lehigh, - - -	230	360,400
Luzerne, - - -	180	115,200
Montgomery, - -	450	288,000
Northampton' - -	1,100	704,000
Philadelphia, - -	220	76,800
Pike, - - -	850	544,000
	<hr/> 5,420	<hr/> 3,468,800

<i>Brought forward,</i>	5,420	3,468,800
Schuylkill 5-8, - -	500	320,000
Wayne, - - -	790	505,600
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	6,710	4,294,400

Susquehanna drains the counties of

✓ Adams 3-5, - -	350	224,000
Bedford 3-5, - -	1,000	640,000
Bradford, - - -	1,260	806,400
Cambria 2-5, - -	330	211,200
Centre, - - -	1,460	934,400
Chester 1-4, - -	180	111,200
Clearfield 9-10, - -	1,450	928,000
Columbia, - - -	630	403,200
Cumberland, - -	630	403,200
Dauphin, - - -	550	352,550
Franklin 1-3 - -	280	179,200
Hunington, - -	1,280	819,000
Indiana 1-10, - -	80	51,200
Lebanon 7-8 - -	280	179,200
Luzerne 9-10, - -	1,920	1,328,800
Lycoming, - - -	2,610	1,606,400
M'Kean 1-4, - -	380	243,200
Mifflin, - - -	910	582,400
Northumberland, -	500	320,000
Perry, - - -	550	352,000
Potter 5-8, - -	750	480,000
Schuylkill 3-8, - -	300	192,000
Susquehanna, - -	910	582,400
Tioga, - - -	1,180	765,200
Union, - - -	600	484,000
✓ York, - - -	1,120	716,800
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	21,390	13,685,600

GEOGRAPHICAL CATECHISM

Genessee drains 1-8 of Potter, 150	96,000
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Potomac drains

Adams 2-5,	-	-	220	140,800
Bedford 2-5,	-	-	630	403,200
Franklin 2-3,	-	-	560	358,400
Somerset 1-6,	-	-	180	115,200
			<hr/> 1,590	<hr/> 1,017,600

Lake Erie drains

Erie county 1-2,	-	380	243,200
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Ohio river drains the counties of

Allegheny,	-	-	810	518,400
Armstrong,	-	-	1,010	646,400
Beaver,	-	-	690	341,600
Butler,	-	-	860	544,000
Cambria 3-5,	-	-	800	512,000
Clearfield 1-10,	-	-	160	102,400
Crawford,	-	-	1,040	665,600
Erie 1-2	-	-	380	243,200
Fayette,	-	-	900	576,000
Greene,	-	-	640	409,600
Indiana 9-10,	-	-	680	435,200
Jefferson,	-	-	1,280	519,200
M'Kean 3-4,	-	-	1,140	729,600
Mercer,	-	-	889	563,200
Potter 1-4,	-	-	520	204,800
Somerset,	-	-	800	512,000
Venango,	-	-	1,200	768,000
Warren,	-	-	900	576,000
Washington,	-	-	900	576,000
Westmoreland,	-	-	1,180	755,200
			<hr/> 16,760	<hr/> 10,598,400

SUMMARY.

Delaware drains	-	6,710	4,294,409
Susquehanna,	- -	21,390	13,685,600
Genessee,	- - -	150	96,000
Potomac,	- - -	1,590	1,017,600
Ohio,	- - -	16,760	10,598,400
Lake Erie,	- - -	380	243,200
		<hr/> 46,980	<hr/> 29,935,200

Q. Can you give a general description of the range of rivers, and what principle may be assumed as a safe one, in describing the rise and course of rivers?

A. "It may be assumed as a general principle, that the mountain streams particularly, either flow northeast or southwest along the mountain valleys or directly at right angles to that course, through the mountain chains. The conformity of the river courses to the mountains, is in a striking manner obvious in the Delaware and Susquehanna. The Delaware rises by two branches in the western spurs of the Catsbergs. The Cookquago to the northwest and Popachton to the southeast, flow from their sources southwest about fifty miles, draining Delaware county in New York. Reaching within about five miles from the northeast angle of Pennsylvania, the Cookquago turns to southeast, and continuing that course five or six miles receives the Popachton. The united streams maintain a southeast course, fifty miles to the mouth of the Nevisink, and northern extremity of New Jersey. The Delaware here touches the northwest foot of the Kittatinny chain, along which it turns to the southwest thirty-five miles to the mouth of Broadhead's creek, from Pike and Northampton counties. Winding to the south below the entrance of Broadhead's creek, it breaks through the Kittatinny and enters the fine valley between that chain and forms a mountain pass, and five miles further down, another

through the southeast mountain. At the southeast base of the latter chain the river once more assumes a south east course after having meandered through the Kittatinny valley about thirty miles.

At Trenton, thirty-five miles below the southeast mountain, the river passes the primitive ledge, and meets the tide; and five miles below, near Bristol and Bordentown, again turns to southwest. Passing along or near the primitive rock, it receives near Philadelphia the Schuylkill from the northwest. Forming its last great bend five or six miles below Newcastle, the bay of Delaware opens into the Atlantic ocean in a southeast direction.

The entire length of the Delaware is by comparative courses from the Catsbergs to the Atlantic ocean, three hundred and ten miles, not quite one-half being tide water. Though rolling over numerous rapids, no cataracts interrupt the navigation, which at times of moderately high water, reaches by both constituent branches into New-York. The general course is, with a trifling deviation to the west, south, and north. When viewed on a map, the various sections of this river have the appearance of artificial arrangement; the two lower bends strongly prove the geological influence of the mountain system. Though but little elevated above the ordinary surface of the country through which it passes, the great primitive ledge pursues a direction remarkably similar to that of the Appalachian chains. From Bristol to its lowest bend below Newcastle, it flows down the southeast margin of the primitive; separating the sandy shores of New Jersey from the micaceous soil of Pennsylvania and Delaware.

Like the Susquehanna and the Potomac, the Delaware receives nearly all its large tributary streams from the west. Of these, only two, the Lehigh and Schuylkill are of considerable magnitude.

From the position of their valleys as channels of inter-

communication and from the mineral treasures found along their mountain sources, the Schuylkill and Lehigh have become of great importance. The Lehigh rises by various mountain branches in Northampton, Pike, Wayne and Luzerne counties; uniting below Stoddartsville, and forming a small, but precipitous river current, pouring first to the southwest, it gradually turns south and southeast, passes Mauch Chunk village, and winding between mountain masses, finally breaks through the Kittatinny, and continuing to the southeast meets the northwest base of the Blue ridge at Allentown. Here it turns to the northeast along the base of the latter chain, and passing Bethlehem, joins the Delaware at Easton. The Lehigh is truly a mountain torrent; there is no other stream of equal length in the United States which presents greater difference of level, between the points of source and discharge.

In a comparative course, it is about twenty-five miles from Stoddartsville to Mauch Chunk, and the fall in the intermediate distance 845 feet; ten miles in a direct line below Mauch Chunk, it passes the Kittatinny, and falls 245 feet in that short space. From the Lehigh Water Gap, or passage through the Kittatinny to its junction with the Delaware it falls 205 feet in a comparative course of thirty-five miles. The entire fall from Stoddartsville to Easton, 1210 feet; comparative course seventy miles. From the junction of its constituent branches below Stoddartsville to its extreme source is about fifteen or twenty miles, giving an entire length of near 100 miles. The fall above Stoddartsville, probably amounts to 500 feet; and if so, this rapid river falls upwards of 1700 feet in 100 miles; and what may be considered in a peculiar manner remarkable, no actual cataract worthy of notice exists in all its course. Above the water Gap, the bed of the Lehigh lies at the base of steep or precipitous mountains, rising in

most places from the margin of the stream. The Scenery is in a peculiar manner wild, bold, picturesque and romantic. Below the Kittatinny, the features of nature are less grand along the banks; but still follow in a rich succession of strongly contrasted and elegant landscape. The varied character of its shores is preserved to its final egress into its recipient at Easton.

The Lehigh is now rendered navigable by dams and pools and connecting canals, for some distance above Mauch Chunk.

The Schuylkill rises in, and drains about five-eighths of Schuylkill county: formed by two branches; which unite immediately above, and pass through the Kittatinny mountain, seven miles southeast from Orwigsburg. Below the mountain it turns to nearly south, in which direction it continues through the Blue Ridge at Reading, after having received Maiden creek from the northeast, and the Tulpehocken above that town from the southwest. Below the Blue Ridge, the river again winds to southeast, passes the southeast mountain above Pottstown, and receiving the Perkiomen, and some lesser creeks from the north, crosses the primitive ledges above, and joins the Delaware below Philadelphia. Its entire length, by comparative courses, is about one hundred miles, twenty above and eighty below the Kittatinny mountains.

A strong resemblance is perceivable between the Schuylkill and the Lehigh, though the scenery along the former, is less rugged than that which skirts the latter stream.

The Schuylkill is now navigable by canals and locks to Port Carbon. The Union canal company have completed a connection between the Susquehanna and Schuylkill by the Swatara and Tulpehocken valleys.

The Susquehanna enters Pennsylvania by two great branches, the Susquehanna proper, and the Chemung or

Tioga. Below their junction at Tioga point, the united streams flow a little south of east, fifteen miles to the foot of the Appalachian system, south of Towanda. Leaving secondary, and entering on the transition formation, it turns southeast and following that general course fifty miles, breaks through several chains and finally, at the mouth of the Lackawannock, nine miles above Wilkesbarre, enters the Wyoming valley and turns to southwest; continuing the latter course near seventy miles down the mountain valleys to Northumberland and Sunbury, and to the mouth of the West Branch. In the entire distance from Tioga Point to Sunbury, the Susquehanna receives no tributary stream of forty miles direct length; the Towanda, Wyalusing, Tunkhannock, Lackawannock, Fishing Creek, and some lesser branches, are mere mountain creeks, rapid, but not more than from twenty-five to fifty-five miles in general course.

Including all its higher northeast branches, the Susquehanna is peculiar in the structure of its valleys.

As a navigable stream, the Susquehanna is much less interrupted by rapids or dangerous shoals, than from the tortuous course it pursues through an extensive mountain system, could be expected. It is also remarkable, that where the various branches of this river pass the respective chains, rapids seldom, and perpendicular falls nowhere exist. The Western branch is in all its extent, a river of Pennsylvania. Rising far within the secondary formation, its extreme western source in Indianna county reaches within less than thirty-five miles of the Allegheny river at Kittanning. Flowing northeast about seventy miles across Clearfield, it receives the Sinnemahoning from the northwest in the southwest angle of Lycoming. Below its junction with the Sinnemahoning it continues northeast fifteen miles, and thence southeast twenty miles to the mouth of Bald Eagle creek, in Centre County. Be-

low the Bald Eagle, the course is a little north of east, thirty-five miles to Pennsborough or Muncy, receiving in the intermediate distance from the north, Pine creek, Lycoming, and Loyalsock. From Pennsborough the course is nearly south, twenty-five miles to the mouth of the North east branch and thirty-five from thence to that of the Juniata. About eight miles below the entrance of Juniata, the Susquehanna, having again assumed a southeastern course, passes the Kittatinny mountains; and ten miles below that chain, the Blue Ridge. Maintaining the latter course sixty miles below the Ridge, this great river is lost in the tides of the Chesapeake bay.

Juniata, the southwest branch of Susquehanna rises in, and drains the northern part of Bedford county. The sources of this stream are in the eastern slopes of the Allegheny chain, and flowing nearly twenty miles east, it passes Bedford, and breaking through several mountain chains, turns abruptly to a course a little east of north, forty miles, and receives the Frankstown branch below and near the borough of Huntingdon county. The general course of Frankstown branch is from northwest to southeast, and below their junction, the united streams follow that course fifteen miles breaking through Jack's mountain. Again inflected to northeast, the Juniata leaves Huntingdon and enters Mifflin county, and pursuing that direction near thirty miles, passes Lewistown, and again winding south and southeast, breaks through Shade mountain into Tuscarora valley. Crossing that valley, in a course of ten miles, it reaches the northwest base of Tuscarora mountain down which it flows ten miles, where, near Millerstown, it pierces the latter in Perry county, over which it flows fifteen miles to the Susquehanna river.

Like other branches of the Susquehanna, the Juniata, is as remarkable for its rapid course as for its exemption

from perpendicular falls. Though originating in, and having its entire course amongst craggy mountains, it is navigable at high water to near Bedford.

The Potomac derives but a small portion of its waters from Pennsylvania. It has its sources in nearly the highest table land of the Appalachian system.

Like those of the Delaware and Susquehanna, the great confluent of the Potomac, are from the right bank.

Savage river and Will's creek from Allegheny, Conecocheague from Washington, and Monocacy from Frederick county in Maryland, are comparatively trivial, when compared with the branches of Potomac derived from Virginia.

At Cumberland, the Potomac reaches within five, and at Hancock's within two miles of the south boundary of Pennsylvania.

Leaving the Atlantic slope, we perceive a great river valley stretching from Pocahontas county, Virginia, over western Pennsylvannia into New-York. This valley extends nearly due north and south at an angle of about forty-five degrees, to the range of the Appalachian mountains, and reaches from North Latitude, $38^{\circ} 30'$ to North Latitude $42^{\circ} 20'$. The extremes giving sources to two rivers that of the north to the Allegheny, and that of the south to the Monongahela. These streams flowing directly towards each other meet at Pittsburg very nearly at the middle point of the valley. Their united waters taking the name of Ohio turns to the west, or rather northwest, as far as the entrance of Big Beaver river. With a very partial exception, western Pennsylvania is drained by the Allegheny and Monongahela.

Having its source in Potter county in Pennsylvania, and interlocking with the head branches of the Susquehanna and Genessee, the Allegheny flows northwest about fifty miles into Cataraugus county, New-York. Abruptly

turning to southwest and preserving that general course one hundred miles, and receiving French creek from the northeast, it thence bends to southeast forty miles, to the mouth of Mahoning. About the middle of the latter course, Clarion river and Red Bank creek, two large branches, enter from the northeast. From Mahoning to Pittsburg, the general course is again southwest about fifty miles.*

Kiskiminitas, a very considerable accessory stream of the Allegheny river, rises in the mountain valley, between the Allegheny and Chesnut Ridge chains, and flowing northwest, breaks through Chesnut and Laurel Hill, and after a comparative course of seventy-five miles, unites with the Allegheny, near midway between the mouth of Mahoning and Pittsburg. From the mouth of this river, the state canal extends along its valley, and that of the Conemaugh (another name for the same stream) to Johnstown, a distance of about 70 miles.

Mahoning and Red Bank creeks have their sources in Chesnut Ridge, and with each a course of about thirty-five miles, the former northwest and the latter southwest, join the Allegheny in Armstrong county. Toby's creek, or Clarion river, has interlocking sources with those of Sinnemahoning and the Allegheny river. The Red Bank rises in the same region with Clarion river and Sinnemahoning; and Mahoning with Red Bank, and the west branch of the Susquehanna.

In point of surface drained, Kiskiminitas is the largest confluent of the Allegheny, and it has interlocking sources with those of the west branch of the Susquehanna, Juniata and Youghiogheny.

*The state canal runs along the west bank of the river from opposite the mouth of the Kiskiminitas to Pittsburg, somewhat more than 30 miles.

Allegheny river receives but two considerable tributaries from the right, French and Conewango creeks. The latter rises in Chataque county, New York, by three branches; the Chataque, Casadaga, and Conewango, which unite in New York, and forming a navigable stream, assume a south course, enter Warren county, Pennsylvania, and fall into the Allegheny, at the town of Warren, after a comparative course of about forty-four miles.

French creek has its source in the extreme southwest angle of New York, and increased by numerous branches from Erie and Crawford counties, Pennsylvania, forms a navigable river at Meadville. Flowing to the southeast from Meadville 25 miles, it unites with the Allegheny river at Franklin in Venango county. The entire comparative course of French creek is about eighty miles. Along this stream the state canal has been finished about thirty miles towards the mouth.

There is no other feature in the hydrography of the United States more remarkable than the country from which Chataque and French creeks have their sources. The extreme north west waters of the former flow from within three, and of the latter, from within five miles of the margin of Lake Erie.

The Allegheny and its branches are the recipients of the northern part of the great western basin of Pennsylvania, and are but little impeded by falls, though their current is rapid.

The Monongahela, formed by two branches, the Monongahela proper, and Cheat river, which rise in Pocahontas, Randolph, Harrison, Lewis, Monongahela and Preston counties of Virginia, and unite, two miles within the south boundary of Pennsylvania. Their general length above Pennsylvania, is about one hundred miles, nearly a north course. Preserving the latter direction sixty miles

in Pennsylvania, and receiving the Youghiogheny from the southeast, the Monongahela mingles with the Allegheny at Pittsburgh, and forms the Ohio.

The various branches of the Monongahela which derive their sources from the western chains of the Appalachian system similar to the Potomac, claim a more than ordinary share of attention, as forming the proposed link in a great line of canal improvement.

Cheat river flows from the northwestern slope of the Allegheny mountain, and draining the eastern part of Randolph county, passes Chesnut Ridge, enters Preston Co., and forms there a navigable stream, continues north, to within five miles of the south boundary of Pennsylvania. Turning to the west, it crosses the south line of Pennsylvania, and unites with the Monongahela.

Youghiogheny rises in the extreme southwestern angle of Maryland, between the sources of the Potomac and Cheat rivers. Pursuing a northern course into Pennsylvania, and augmented by Castleman's river, its northern branch, it turns to northwest, and breaking through Chesnut Ridge and Laurel Hill, joins the Monongahela at M'Keesport, eighteen miles above Pittsburgh. This is a fine mountain stream which in all seasons, except in periods of long drought, contains more than sufficient water for a supply of the most capacious canal; general comparative course about one hundred miles—thirty in Maryland, and and seventy in Pennsylvania.

The Youghiogheny heads with the Cheat branch of Monongahela, with the north branch of Potomac, and by Castleman's river, with Juniata and Kiskiminitas.

At Pittsburgh, the Ohio is formed by the confluence of the Allegheny and Monongahela. The former is the principal stream. From Pittsburgh to Beaver river, the Ohio pursues a northwest course twenty-five miles; thence winding to the west twenty miles, in which it

leaves Pennsylvania, and enters into Ohio. Within the latter state, the Ohio river inflects to a course a little west of south, seventy miles; reaching in that direction, nearly the same latitude with the south boundary of Pennsylvania.

The peculiar courses of the Monongahela and Ohio, form one of the most remarkable intermediate peninsulas presented by the topography of the United States. The two streams flow in very nearly opposite directions, the intervening space being from thirty-five to forty miles wide, with a mean length of sixty miles. Though hilly, rather than mountainous, this peninsula is elevated to from six hundred to one thousand feet in the dividing line of its waters, above the adjacent rivers. A number of creeks, none of which can exceed a comparative course of twenty-five miles, are poured from the interior spine into the respective recipients. The dividing ridge is evidently continued north of the Ohio river, broken by that stream a few miles below Pittsburg. The northern section is continued, inflecting between the western sources of the Allegheny, and the eastern sources of Big Beaver river, and is finally lost on the southeastern shores of lake Erie; the southern, stretching between the confluents of the Ohio and Monongahela rivers, mingles with the Appalachian chains between the sources of the latter and the little Kenhawa. This ridge is the western buttress of the upper basin of Ohio, and affords a very striking example of the real difference between a chain of hills and one of mountains. The ascent by the rivers to the western ridge of Pennsylvania is so gradual, and the hills scattered in such promiscuous windings through the sources of the streams, that an ascent of six or seven hundred feet, in a few miles, is imperceptible; on the contrary, the mountain chains extend in regular lines, uninfluenced in their direction by the water courses, and are abrupt and steep in

their declivities. The mountain seems to have existed previous to the rivers, whilst the hills appear to have been formed by the abrasion of water.

Big Beaver, the first river which enters the Ohio, pours its current from the north, and falls into its recipient, twenty-five miles below the confluence of the Allegheny and Monongahela: Big Beaver is formed by the Mahoning, Shenango, Neshannock and Conequenessing creeks. The Shenango rises in Ashtabula county of Ohio, and Crawford of Pennsylvania, within twelve miles of the southeast shore of Lake Erie, interlocking sources with those of Grand river, Conneaut, and French creek, and pursuing a nearly south course of Mercer, receives the Conequenessing from the northeast, and entering Beaver county, unites with the Mahoning and forms Big Beaver. The Mahoning is, in reality, the main branch; rising in Columbiana, Stark, Trumbull and Portage counties, Ohio, its course is first nearly north thirty miles to near Warren, in Trumbull county. Winding to southeast, it pursues that course thirty-five miles, entering Pennsylvania in the southwest angle of Mercer, and joining the Shenango at north latitude 41 degrees, about two miles within Beaver county. Below the junction of the Mahoning and Shenango, Big Beaver flows a little east of south, twenty miles into the Ohio river. Conequenessing is the eastern constituent stream of Beaver, draining the peninsula between the Allegheny, Ohio, Big Beaver and Shenango rivers. The state canal follows this stream to the town of Newcastle, twenty-four miles and three quarters from its mouth, and thence towards Lake Erie.

The valley of Big Beaver is nearly circular, and about seventy miles in diameter; area, 3850 square miles. It is worthy of remark, that the general courses are nearly on a direct northwest line; of the Youghiogheny below the mouth of Castleman's river, Monongahela and Ohio, from

the mouth of Youghiogheny to that of Big Beaver; and the latter, and Mahoning, to about three miles above Warren. This range of navigable water is from one hundred and eighty to two hundred miles, following the sinuosities of the streams.

The sources of the Mahoning interlock with those of the Tuscarawas branch of Muskingum, and Cuyahoga and Grand river of lake Erie."

Q. Are there any good harbors in this state?

A. Thirty-nine miles of the northwest border of this state lie upon lake Erie; this extent contains the harbor of *Presque Isle*, or Erie, which affords a good haven for small vessels.

Q. How is the soil in this state?

A. No state in the Union is richer in agriculture than this. Its soil is emphatically adapted to raise *grain*, for it contains a greater proportion of good land, than either of the Atlantic states. This arises from its peculiar geological arrangement, as the greater part of the state consists of transition and secondary formation, in which the soil is generally richer and more productive.

The land, bordering on the rivers, in the primitive formation, is of a superior quality, but generally the soil in this division is light.

The small portion of the primitive, in the southeast corner of the state, is exceeded by a vast extent of transition, seventy miles in width, terminating, as we have seen, near the summit of the Allegheny mountain. In this formation is found much land which is rich and productive. That portion which extends through Chester, Lancaster, and York, is eminently productive. Here limestone and marble of a superior quality, are found. Between the Blue Ridge and Kittatinny mountain is the Cumberland valley, sometimes called the Great Limestone valley. It is between fifteen and twenty miles in width, bending

with the mountains. The southern part is formed of transition limestone, the northern of clay slate; the line of demarcation being nearly in the centre. The whole extent, within the state, is about one hundred and sixty miles.

The limestone section is rather level, having a most productive soil. Planted with towns and villages, highly cultivated, and thickly populated, the inhabitants, pursuing the business of agriculture, enjoy, in rich profusion, the bounties of Providence. In all limestone countries, great inconveniencies result from the unequal distribution of water. While some portions are well supplied, others are so destitute, that the inhabitants are not able to procure enough for domestic purposes. The slate region is more hilly, and the soil less prolific.

In the remainder of the transition, the soil is greatly diversified. It is good or bad, according as limestone is more or less prevalent. Throughout the region of anthracite coal, the country is unproductive, and may be pronounced sterile.

The exceptions are, the alluvials, on the Delaware, Susquehanna, and their principal tributaries. Limited by the Susquehanna river on the east, and the Kittatinny mountain on the south, is a large tract of country, which seems to be founded on limestone. Wherever it mingles with the soil, it produces great fertility, but, like all limestone countries, is subjected to the inconvenience of a very partial supply of water.

The vegetable productions of the transition are greatly diversified. The forests abound with all the varieties of timber indigenous to the soil; and the scenery is diversified by every variety, from the rippling rill, and shady grove, to the spreading vale, the towering mountain, and descending cataract.

“The river navigation of the primitive and transition

formations, agreeable to their general character, is obstructed by many rapids and falls; and is liable to the freshets of mountain torrents, breaking through narrow and rocky passages, with all the extremes and inconveniences of too much or too little water.

“The secondary formation, extending from a line running on or near the Allegheny mountain, may be stated as generally fertile; for though the soil may be sandy on the hills, where the sand-stone prevails, it is uniformly rich in the valleys. In approaching the Allegheny from the eastward, it presents a bold and precipitous front; and from two to five miles will bring the traveller to the summit, whence the descent westward is scarcely perceptible. The Laurel Ridge is so steep, precipitous, and rugged, that it cannot be cultivated. Its scenery is wild, and aspect very forbidding. The Chesnut Ridge is, comparatively, low, its appearance less savage, and its soil less forbidding.

“The whole of Western Pennsylvania may be characterized as table land. The soil of the mountain valleys is well watered, and excellent. Leaving the mountains, the country consists of arable hills, or as it is commonly called, the rolling ground. Near the water courses, the hills are sometimes too steep for cultivation, although possessing a fine soil, and clothed with a luxuriant growth of timber.

“The general, nay, almost universal, fertility of Western Pennsylvania, must, of course, be ascribed to the constituents of the soil, which is a loam, having, in various proportions, limestone, slate, coal, gypsum, salt, and vegetable and animal remains. Coal is often used as manure.”

Q. What is the Geological formation of this state ?

A. Geologists divide Pennsylvania into three great sections, primitive, transition, and secondary. Though these divisions are strongly marked by the rocks which characterize them, they are, nevertheless, mixed with strata belonging to other formations, as may be perceived from the *Pennsylvania Gazetteer*.

“But none of these divisions, (primitive, transition, and secondary,) though composed, chiefly, of the rocks which characterize them, are unmixed with strata which pertain to some one of the other divisions. The secondary perhaps is the most uniform.

The southeastern portion of the state is classed with the primitive formation; to which classification the small portion of alluvial, overlaying the primitive rock, should not be deemed an exception.

The rocks of this formation, are Granite, Gneis, Mica Slate, Clay Slate, Primitive Limestone, Primitive Trap, Serpentine, Porphyry, Sienite, Topaz Rock, Quartz Rock, Primitive Flinty Slate, Primitive Gypsum, White Stone. The strata of these rocks run from a north and south, to a northeast and southwest direction, and dip generally to the southeast at an angle of more than forty-five degrees from the horizon; the highest elevation is towards the northwestern limits, which gradually descends to the southeast, where it is covered by the alluvials; and the greatest mass, as well as the highest mountains, are found towards the northern and southern extremities of the northwestern boundaries. The outline of the mountain of this formation, generally consists of circular, waving, detached masses, with rounded flat tops; or conically waving in small pyramidal tops.

Within the limits prescribed to the primitive, there are portions of transition and secondary formations. A

range of the latter passes three miles west of York by Hanover.

This secondary appears to belong to the oldest red sand stone formation; though in some places about Leesburg, Reading, &c., the red sand stone only seems as a cement to a pudding formed transition limestone, and other transition pebbles, with some quartz pebbles, large beds of green stone trap, and wacke of different kinds, which leaves in many places this sand stone formation, and forms the small hills or long ridges that occur so frequently in it. The stratification, in most places, runs from an east and west, to a northeast and southwest course, and dips generally to the northwest, at an angle most frequently under twenty-five degrees from the horizon, covering both the primitive and transition formation at every place where their junction could be examined. In the red sand stone formation, copper pyrites, blend, and galena, have been found on the Perkiomen creek, running nearly south and north, across the east and west direction of the red sand stone; and a small bed from a half to three inches thick, of brown or red copper ore, is interspersed, and follows the circular form of the iron bed at Grubb's mines.

There is also within the prescribed limits of the primitive, a bed of transition rock, running nearly southwest from the Delaware to the Yadkin river, dipping generally to the southeast, 25 or more degrees, in width from two to fifteen miles. It runs from the west of Morrisville to the east of Morristown, passes Lancaster, York, Hanover, Frederickcity, Bull run mountain, Milton, foot of Pig river, Martinsville, and finishes near Mount Pilot on the Yadkin river.

This vein is called secondary, by Mr. Darby. It is narrow between the Delaware and Schuylkill rivers, but widening southwest from the latter, embraces the central

parts of Chester, Lancaster, and York counties. It consists of beds of blue, grey, red and white, small grained transition lime stone, alternating with beds of greywacke and greywacke slate, quartzzy granular rocks, and a great variety of transition rocks. Much of the limestone is intermixed with greywacke slate; parts of it contain so great a quantity of small grained sand as to resemble the dolomite, and, in many places, marble of various colours and quantities, some of which is in grained and white, fit for the statuary, occurs.

Granite in large masses is not found in the state. The principal rock is Gneis, which includes considerable beds, in places, of a very large grained granite, which run and dip as the Gneis does. In these beds, emeralds, phosphate of lime, tourmaline, garnet, cymophane, octahedral iron ore, graphic granite, &c. are found. These beds are mixed, and alternate occasionally in the same Gneis, with the primitive lime stone, hornblende, and hornblende slate, serpentine, magnetic iron ore and feldspar rocks. In some places the Gneis runs into the mica slate; in others, large nodules of quartz or feldspar, and in others, hornblende takes the place of mica; and probably all the primitive rocks may be found in the Gneis formation. The mineral substances found in the primitive, are garnets in the granite and micate slate, from the size of a pin's head to many inches in diameter; staurotide, andalusite, epidote, in vast variety and abundance, tremolite, all the varieties of magnesian rocks, emerald, &c. &c. And it is probable that almost every mineral discovered in similar situations on the ancient continent of Europe will be found on this. The metals in this formation are various; such as iron in various forms, black lead, native and grey copper ore, molybdena, arsenical pyrites, red oxide of zinc, gold to the south, manganese, north and south, white ore of Cobalt in Connecticut and New Jersey, &c. &c. These metallic re-

positories appear in beds, disseminated, or lying in masses. Veins to any great extent have not yet been discovered in this formation.

The transition formation is limited on the southeast side, by the northwest boundary prescribed to the primitive rocks, and on the northwest by the southeast edge of the great secondary formation, on a line that passes considerably to the westward of the ridge, which divides the eastern and western waters, in Georgia and North Carolina, and part of Virginia; and runs near it in the northern part of that state, and in the state of Pennsylvania and New Jersey.

The line of demarcation runs between the Alabama and Tombigbee rivers to the northwestward of the north fork of the Holstein, till it joins the Allegheny mountains, near the Sulphur Springs, along that dividing ridge to Bedford in Pennsylvania, and from thence northeast to Fort Ann, near lake Champlain. The separation of this from the secondary formation, is not so regularly and distinctly traced as in the other formations; many large valleys are found of horizontal secondary limestone, full of shells, whilst the ridges on each side consist of transition rocks. The two formations interlock and are mixed in many places so as to require much time and attention to reduce them to their regular and proper limits. It is however probable, that to the northwest of the line here described, little or no transition will be found, although to the south of it, partial formations of secondary may occur.

“The transition formation is generally broadest, where the primitive is narrowest, and *vice versa*; and runs from twenty to one hundred miles broad; the stratification bears from a north and south, to a northeast and southwest direction, dipping generally to the northwest, at an angle in most places under 45° from the horizon.”—

“The outline of the mountains of this formation, is almost a straight line, with few interruptions bounding long parallel ridges of nearly the same height, declining gently towards the side where the stratification dips from the horizon, and more precipitous on the opposite side, where the edge of the stratum breaks out to the day.”

“This formation is composed of the following rocks, viz: a small grained transition limestone of all the shades of color from a white to a dark blue, and in some places intimately mixed with a stratum of greywacke slate, in many places an intermixture of small grained particles, having the appearance of a sand stone with excess of lime cement. This occurs in beds from fifty to five thousand feet in width, alternating with greywacke and greywacke slate. Near the borders of the primitive is found a silicious aggregate, having particles of a light blue color, from the size of a pin's head to an egg, disseminated in some places in a cement of slaty texture, and in others in quartzose cement; fine sand stone cemented with quartz in large masses, often of a slaty structure, with small detached scales of mica intervening; a rock not far from the borders of the primitive, partaking both of the porphyry and the greywacke, having both feldspar crystals and rounded pebbles in it, with a cement of a kind of dull chlorite slate in excess; another, through rarer, with pebbles and feldspar crystals in a compact petrosilicious cement; and a great variety of other rocks, which from their composition and situation, cannot be classed but with the transition.”

“The limestone, greywacke, and greywacke slate, generally occupy the valleys, and the quartzzy aggregates, the ridges: amongst which is what is called the country burr stone, or mill stone grit; which must not be confounded with another rock, likewise denominated mill stone grit, which is a small grained granite, with much quartz, found

in the primitive formation. There are many and extensive caves in the limestone of this formation, where the bones of various animals are found."

"Beds of Coalblende or Anthracite accompanied by alumslate, and black chalk, have been discovered in this formation, in Rhode Island, and in immense quantities on and near the Lehigh, Schuylkill and Susquehanna rivers; and a large body of alumslate, on Jackson's river Virginia and in several places in Pennsylvania; many considerable veins of the sulphate of barytes cross it in different places. Iron and lead are the principal metals found in this formation; the lead, in the form of Galena, in clusters; the iron, disseminated in pyrites, hematitic and magnetic iron, or in beds; and considerable quantities of the sparry iron ore in beds, and disseminated in the limestone."

The Southeast limit of the secondary formation is bounded by the irregular and ill defined border of the transition from between the Alabama and Tombigbee rivers to Fort Ann, near Lake Champlain. On the northwest side, it follows the shores of the great lakes and loses itself in the alluvial of the great Basin of the Mississippi from two hundred to five hundred miles in breadth, and extending probably on the west of that river, to the foot of the stony mountains.

Immense beds of secondary limestone, of all the shades from a light blue to a black, interrupted in some places by extensive tracts of sand stone, and other secondary aggregates appear to constitute the foundation of this formation on which reposes the great and valuable coal formation extending from the head waters of the Ohio in Pennsylvania, with some interruption, all the way to the waters of the Tombigbee, accompanied by the usual attendants, slaty clay, and freestone with vegetable impressions, &c. but in no instance covered by, or alternative with, any

rock, resembling basalt, or indeed any of those called the newest flötz trap formation."

"Along the southeast boundaries not far from the transition, a rock salt, and gypsum formation has been found." And in western Pennsylvania, salt has been discovered between the Allegheny mountain and the Ohio, in very many places, and may perhaps be obtained in that district at the distance of from 500 to 750 feet from the surface.

Metallic substances, heretofore found in this formation. are ironpyrites, disseminated both in the coal and limestone; iron ores, consisting principally of brown, sparry, and clay iron stone in beds; galena, but whether in beds or veins has not been ascertained."

Large detached masses of granite, are found lying on this formation from Harmony to Erie, and from thence by the Genessee country to Fort Ann; though in many places, no granite of this kind has been found in places nearer than two hundred miles, at the falls of the Mohawk, or perhaps on the north side of the lakes.

The great mineral treasures of Pennsylvania, are coal iron, and salt; all these are abundant, and with her agriculture will form the principal sources of her future prosperity. The Anthracite coal is found in the transition formation, and with some inconsiderable exceptions in that which is east of the Susquehanna river. Its present known limit on the north, is in the Tunkhannock mountain, on the sources of the Lackawanna river and on the confines of Susquehanna, Wayne and Luzerne counties. It extends thence, along the valley of that stream to the Wyoming valley; thence through the Wyoming valley to the hills near Berwick, on the Susquehanna river, making together a distance of eighty miles. This coal tract is from half a mile to five miles wide, and is estimated at an average width of two miles; through the whole of which, coal is found in strata of from five to fifty feet thick. Estima-

ting the average thickness of the stratum of coal at twelve feet, (which is said to be less than the truth) this field contains 1,395,870,000 tons of coal, which with all the appliances which could reasonably be given, could not be exhausted in ten thousand years.*

Another coal field is known to exist, embracing the south eastern section of Luzerne county, and a portion of the southwestern part of Northampton county, and extending thence westward to the Susquehanna river, by Bucks and Cattawissa mountains, the probable northern boundary of the field, and along Spring mountain, and the Mahony mountains, the probable southern boundary through Schuylkill, Columbia and Northumberland counties, also to the Susquehanna river. This field has not been thoroughly explored, its width may be more than seven miles, and its length from the Lehigh to the Susquehanna rivers more than sixty miles. At Beaver Meadow, north of the Spring mountain in Northampton county, and at many places along the valley of the Mahony, coal in great abundance and of excellent quality, is found in strata of perhaps 50 feet in thickness, has been opened to the day, and efforts are making to bring it from these points to market.

Another very extensive coal measure, if another it may be called, commences on the right bank of the Lehigh river, at the Mauch Chunk mountain, in Northampton county, and extends thence through Schuylkill and Dauphin counties to the Susquehanna, a distance of not less than 75 miles. This measure is bounded on the southwest by a mountain chain, which we believe bears the name of Mahoning, near the Lehigh, Sharp mountain from its configuration, in Schuylkill county, and from its

* View of Judge Scott.

relative position, is the third mountain in Dauphin county. On the northwest its limit may be the Broad mountain, which has a continuous course by that name across, and from the Lehigh river through Schuylkill county, and ends in Lyken's township, Dauphin county, where it is called the Short mountain. The width of this tract is variable, averaging about six miles. It embraces the mines of the Nesquehoning, Mauch Chunk, Tamaqua, the Schuylkill, of Pottsgrove and its vicinity, of the West Branch of the Schuylkill, of Pine Grove, and Swatara, and of Stony Creek, Bear Meadow, and other places of Dauphin county. We have said, in conformity with an opinion generally expressed, that the Sharp mountain, forms the southeast boundary of the coal region throughout its whole extent. But, this is disproved by the fact, that anthracite has been discovered in all the ridges, in greater or less quantities, north of the Kittatinny mountain, in Dauphin county. The northwestern limit of the region generally, is along the Susquehanna river, but the coal basin of Luzerne county, runs under that stream, and the coal is seen in the bed of the river, and in the Shawnee mountain on the northwest of the river. And we have been informed that it has been discovered, some miles more to the southwest. Coal has not yet been discovered in Pennsylvania northeast of the Lehigh river; but as it is an unexplored region of the same geological character, as the anthracite district, it may yet be discovered in that direction.

With the exception of a vein of anthracite, *said* to have been recently discovered in the Delaware water Gap, that mineral is not known to occur, within ten miles of the Kittatinny mountain, or of the Shawangunk, a part of the same chain which presents similar rocks.

The anthracite region is in a great measure covered by mountains running parallel with the Kittatinny, often

broad, with table land summits, and rising generally about 1500 feet above the ocean.

The beds and veins of anthracite range from northeast to southwest, and may often be traced for a considerable distance by the compass. The veins have the inclination of the adjacent strata of greywacke, with which they often alternate, usually between 20 and 45 degrees. In some places they are horizontal, in others vertical, in others in basins; and the strata of particular mines generally have the form of the upper surface, immediately over them; and are therefore sometimes curved, or irregular, or saddle, or mantle shaped, and some times dome shaped. The beds and veins of coal have commonly narrow strata, of dark colored, fine grained argillaceous slate, for roof and floor; which generally contains sulphuret of iron, and disintegrates on exposure to the air. The sulphates of iron & alumine are often observed in this schist, and it frequently presents impressions of plants, and sometimes marine shells. Impure pulverulent coal is generally connected with this slate. The quality of the coal varies in different parts of this region, density and inflammability. It is in many places injuriously affected by the admixture of slate; others it has so little coherence, that it cannot be profitably transported. That upon the Lehigh is said to be purer than that in the vicinity of the Schuylkill; but if this be true, the defect is perhaps overbalanced by the superior inflammability of the latter. That in Dauphin county is reported to possess so much inflammable matter, that it has been mistaken for bituminous coal.

The bituminous coal region of the state is almost, perhaps wholly, within the secondary formation. If such be the fact, that formation extends, in the southern part of the state, much farther east of the great Allegheny chain, since bituminous coal is found abundantly east of the Raystown branch of the Juniata river in Huntingdon and

Bedford counties. West of that mountain, it is found almost every where from the northern to the southern boundary of the state, and if wanting any where, it is in the northwest corner. It has been traced from Bedford and Tioga counties, to Maryland, and may be found in every hill on the western line from Crawford county southward. It occurs on the Allegheny mountain, at a considerable elevation, and elsewhere, in nearly a horizontal position, alternating with grey sand stone, which is often micaceous, and bordered by argillaceous schist. The veins are generally shallow, varying from one inch to six feet in thickness. The mean depth is about five feet. The beds most proximate to the eastern market are Lycoming and Clearfield counties: to reach those of the former, was a principal inducement for making the state canal along the west branch of the Susquehanna river, to the mouth of the Bald Eagle creek.

Iron ore occurs in various parts of Pennsylvania.— But it is found in the greatest abundance, and of the best quality, in the extensive calcareous valleys situated between the ridges of the Appalachian mountains, particularly in the counties of Centre, Huntingdon, and Mifflin. It is mostly raised from beds of argillaceous earth, resting on limestone. The best ores of iron in this country exist in or adjacent to calcareous districts. The iron manufactured in the above named counties, under the name of Juniata iron, is distinguished for tenacity, malleability, and other valuable qualities. About fifty per centum of iron in pigs is extracted from the Juniata ore, and it loses one-third in passing from the bloom to the bar iron. In western Pennsylvania, iron ore is much less abundant than coal, and it is also very extensively manufactured; but soft bar iron, we understand, cannot be made from ores west of the Allegheny mountain. Upon the east of the Susquehanna, in the transition region,

iron and anthracite coal are rarely found contiguous to each other.

We have already observed, that rock salt pervaded very extensively, the whole of the great secondary formation. Salt springs are common in various parts of western Pennsylvania. The water is generally weak near the surface, but it is very strong when produced from the depth of three hundred and fifty to seven hundred feet. One spring, containing as much salt as the waters of Salina, has been discovered by boring, about 20 miles from Montrose, in Susquehanna county, bordering on the state of New York. Salt springs are found on several of the tributaries of the west branch of the Susquehanna, as on the Loyalsock in Lycoming county, and on the Sinnemahoning in Clearfield county; on the Clarion river or Toby's creek, in Armstrong and Venango counties; on the sources of the Conneautte creek in Crawford county; on the Buffalo and Conequenessing creeks, in Butler county; on the Beaver creek, in Beaver county, and very frequently in the southern counties, as far east as Bedford county. But the most productive saline springs of Pennsylvania, are on the banks of the Conemaugh, Kiskiminitas, and Allegheny rivers; and upon the last, about 30 miles above Pittsburgh.

In considering the adaptation of the soils of Pennsylvania for agriculture, the geological divisions furnish the most convenient form of classification. We have seen that the state consists principally of the transition and secondary formations, having a small quantity of primitive, east of the mountains; and from these causes, it contains the greater quantity of good lands, in proportion to its surface, of any of the Atlantic states. The primitive does not extend more than 25 miles N. W. from the S. E. border of the state. The soil is light and indifferent where the Gneis, granite or serpentine prevails. The limestone

may form a tolerable soil, as the country, though broken, is not hilly, and has nothing that can be called a mountain.

The extensive transition formation which succeeds the primitive, occupies nearly seventy miles in breadth to the top of the dividing ridge between the western and the eastern waters, which forms the summit of the Allegheny mountains. In this place the transition is wider than in any other part of our range of mountains, and is only interrupted for about 20 or 30 miles between Norristown and Reading, by being covered with the oldest red sandstone formation. The soil through the whole of this tract, when level, is tolerably good; where formed by the alluvial of the rivers, it is generally rich and fertile; but the quartzzy and silicious aggregates, which most frequently occupy the mountains, decompose into light sandy soil, though the valleys between the mountains are rich and productive.

The vein, S. E. of the old red sandstone called by Mr. Maclure transition, and by Mr. Darby secondary, is narrow between the Delaware and Schuylkill rivers, but widens S. W. from the latter, comprehending the central parts of Chester, Lancaster, and York counties. Limestone and marble, of very superior quality, abound in this formation, and consequently the soil is very productive; of which the Great Valley of Chester county affords the most delightful and satisfactory testimony. In the primitive, S. E. of this valley in Chester county, we are informed that small beds of limestone are found, which add much to the strength of the neighboring soils.

The valley between the Blue Ridge and the Kittatinny mountain, sometimes called the Kittatinny valley, and also known as the great limestone valley of Pennsylvania, is from 15 to 20 miles wide, inflecting with the mountains. It is nearly equally divided between the limestone and

slate formations, its whole length. The section within the state is about 160 miles in length, and covers an area of near 3000 square miles. The S. E. part is formed of transition limestone, the N. W. of clay slate. On the Lehigh, the limestone and slate touch at a place called the Slates, seven or eight miles above Allentown. Thence the line of separation extends S. W., through Berks county; leaving Kutztown on the limestone, crosses the Schuylkill nearly midway between Reading and Hamburg, and the Tulpehocken N. E. of Womelsdorff, leaving the latter upon the limestone; thence through Lebanon county, leaving the borough of Lebanon upon the limestone, and reaching the Swatara near the mouth of the Quitapahilla. From the latter creek to Hummelstown, in Dauphin county, the Swatara forms the boundary, generally. That village and its immediate vicinity is based on limestone, and immediately at the bridge over the Swatara, on the road to Harrisburg, the Swatara leaves the slate and pursues the residue of its course to the Susquehanna, over limestone. The division line between limestone and slate, follows a S. W. course from Hummelstown to the mouth of Paxton creek, near the borough of Harrisburg, which rests on the alluvial deposit, partly on the slate, and partly on the limestone. S. W. of this point, on the Susquehanna, to the Maryland boundary, the demarcation between the limestone and slate, curves with the contiguous mountains, leaving on the former rock in Cumberland county, Carlisle and Shippensburg, and in Franklin county, Chambersburg and Greencastle,—and it quits Pennsylvania nearly with the Conecocheaque creek.

This limestone section is comparatively level, with a very superior soil,—studded with towns and villages, extremely well cultivated, and inhabited by a large population, enjoying in profusion the comforts of life—pursuing

With little exception, the business of agriculture. As in almost all limestone countries, spring water reaches the surface of the earth at distant points, and in very unequal quantities, leaving intermediate spaces so deficient, as to be distressing to the inhabitants. The slate region is more barren than the limestone, and its soil of inferior quality; but this is in some measure compensated, by the great ease with which it may be cultivated, and when the lime manure on the slate soil shall be extended, it is probable that the product of the slate will equal that of the limestone districts. Water is more equally diffused over the former than the latter. In respect to forest timber, no striking difference is observable.

The remainder of the transition formation N. W. of the Kittatinny mountain, varies considerably in agricultural value, which seems to be determined pretty much by the quantity of limestone which blends with the soil. East of the north branch of the Susquehanna river, throughout the anthracite region, the whole country may be pronounced sterile, with the exception of the alluvial flats of the Delaware and Susquehanna rivers, and their greater tributaries. West of the Susquehanna river, and north of the Kittatinny mountain, the country would seem to be universally based on limestone; it fills most of the principal valleys, and is believed to underlay the mountains. Wherever it degenerates into soil, that soil is fertile, but frequently subjected to the inconvenience we have already mentioned, the unequal distribution of water. The mountains, composed of slate and sand stone, are generally barren. There are valleys, however, where the limestone does not appear, which are rendered very fertile by the alluvion from the mountains.

The river navigation of the primitive and transition formations, agreeable to their general character, is ob-

structed by many rapids and falls; and is liable to the freshets of mountain torrents, breaking through narrow and rocky passages, with all the extremes and inconvenience of too much or too little water.

The secondary formation, extending from a line running on or near the Allegheny mountain, may be stated as generally fertile; for though the soil may be sandy on the hills where the sand stone prevails, it is uniformly rich in the valleys. It loses little of the vegetable mould by washing, owing to its general horizontal position; and the accumulation of such vegetable manure is in proportion to the time the trees have been growing on the soil.

That portion of the surface of this district between the Allegheny mountain and the Chesnut Ridge, contains all of it that is mountainous; but these mountains partake of the character of the formation in the position of the strata, and character of the soil.

In approaching the Allegheny from the eastward, it presents a bold and precipitous front; and from two to five miles will bring the traveller to the summit, whence the descent westward is scarcely perceptible. Much of it might be called table land, for even on the summit, tracts of level, and frequently excellent land extend for miles, in which are many fine farms, the soil of which, though somewhat cold, repays the labor of cultivation. The Laurel Hill, next west of the Allegheny, is little below the latter in height. It is so steep, rugged, and precipitous that it cannot be cultivated. Its scenery is wild, and its aspect very forbidding.

The whole of western Pennsylvania might be characterized as table land; low water mark at Pittsburg is one hundred and fifty-two feet above Lake Erie; seven hundred and twenty-seven above the Hudson at Albany,

and seven hundred and fifty-six feet above the Atlantic ocean at Cape May. The apices of the highest range of hills are about twelve hundred feet above tide water level in the Chesapeake. The soil of the mountain valleys is well watered and excellent.

Leaving the mountains, the country consists of arable hills, or, as it is commonly called, rolling ground. Near the water courses, the hills are sometimes too steep for cultivation, although possessing a fine soil, and clothed with a luxuriant growth of timber. This description embraces the greater part of Westmoreland, the western part of Fayette, Washington, Allegheny, Beaver, and Indiana. The three first named counties have the finest land; and Washington is placed first in rank. Mercer, Crawford, and Erie, have large bodies of level land of excellent quality; better adapted to grass than grain. Butler, Armstrong, Venango, and Warren, have soils so various, that it is difficult to give them a general character. Whilst large bodies might be pronounced almost worthless, and others deemed valuable only for their timber, there are extensive tracts which will not suffer comparison with any land in Pennsylvania.

Q. What are the minerals of this state?

A. The most important are iron ore, Anthracite, Bituminous and some Kennel coal, the latter lately discovered by Prof. Rogers. In no part of the world is coal so plentifully found as in Pennsylvania. The western part is abundantly supplied with bituminous, and the eastern part with anthracite, this district containing this is principally occupied by mountains running parallel to the blue ridge, often very broad, with table summits, and rising generally from 1200 to 1500 feet above the ocean, and that is found on the rivers Conemaugh, Allegheny, Mononga-

hela, Ohio, and in numerous places, west of the Allegheny ridge—it is found in Huntingdon and Bedford county east of the Raystown branch of the Juniata.

The following extract from Hazard's Register will show the importance of the coal trade of Pennsylvania.

“ The coal trade of Pennsylvania, recently and suddenly starting into existence, now constitutes one of the main branches of our domestic industry, and an important portion of the commerce of the state and the Union. It has given a new stimulus to individual, as well as national enterprise, and affords active and profitable employment for numerous and various classes of the community. It has introduced a spirit of improvement, interspersing the country with canals and Rail-roads, which by connecting the distant parts together, promote the convenience and prosperity of the people, while they add to the strength, and elevate the character of the state. It has raised up, in our formerly barren and uninhabited districts, an intelligent permanent population, and converted the mountains into theatres of busy life, and our hitherto waste and valueless lands into sites for flourishing and populous villages. It has opened a new field for the investment of capital, the expenditure of labor, and the pursuit of all the purposes of civilization and society. Its benefits are not alone confined to those engaged immediately in the trade, but are becoming general and universal. Possessing all the varieties of their species, anthracite and bituminous, furnishing a cheap and preferable article of fuel; and affording new facilities to the manufacturer. The mineral coal of Pennsylvania now exerts an influence on every other branch of trade, affording the means of rearing, and permanently supporting on this side the Atlantic, all the mechanical arts and handicrafts of the old world.”

Q. Is iron ore abundant and of a good quality?

A. It is abundant and of a good quality, there are about

60,000 tons of iron manufactured annually. The best iron ore is found in abundance in the calcareous valley between the ridges of the Appalachian mountains, particularly in Huntingdon, Centre and Mifflin counties.—A good quality is also found in many other counties, indeed in almost every county in the state, in Cumberland, Perry, &c. &c. There are about seventy-five furnaces in Pennsylvania.

Q. Are there any other important minerals?

A. Copper ore, in a variety of combinations, is found in many places among the mountains,—there is some in Adams county, at Perkiomen Montgomery county. And I have seen a good quality obtained in Berks county. There is also an abundance of lead in some parts of the state. There is a lead mine at Perkiomen. “There is some Zinc molybdena, titanium, &c, Sulphate of *baryta* has been found in Bucks county, and recently explored to some extent. Gypsum and hydraulic cement exist in immense quantities.*” White and variagated marble abound in Chester and Montgomery, and other building stones, as the common limestone, free-stone, granite and gneis rocks, slate, &c. There are quarries of slate in York, Lancaster and Wayne counties. Rock slate is found very extensively in the western part of this state. Alum also abounds.

Q. Are there any mineral springs in this state?

A. There are many of the salt and other mineral springs. The salt springs are productive, and among the most productive are those near the margins of the Conemaugh Allegheny and Ohio rivers.

The resources for the manufacture of salt in Pennsylvania seem to be inexhaustable. The capital employed,

* Trego's Report.

cannot be less, at a fair estimate, than 500,000, and the amount of salt annually manufactured, cannot be less than 650,000. The cost per bushel does not exceed 13 cents.

There are also mineral springs, called *medical mineral-springs*. The most noted are the *Bedford springs*, discovered in 1804. They arise from a lime stone rock, at the foot of Dunning's mountain. There are several springs there all said to possess *curative* powers, efficacious in removing cutaneous and chronic complaints. The principal medical spring is *Anderson's*; another is called *Fletcher's* or the upper spring; the limestone spring; the sulphur spring, and the Chalybeate spring. The waters are charged with iron, magnesia and lime. There are several other medical springs in this state; the *sulphur springs*, near Carlisle; the warm springs Perry county, and the *York sulphur springs*, Adams county. Another 4 miles from Pittsburg. Dr. Mead recommends the water.

Q. Are there any caves?

A. In the *Laurel mountain* is one with a very narrow entrance, and various winding passages, which has been traversed two miles. It is formed of a soft sand stone, and its roof is lined with bats. There is another at Durham Bucks county about 50 miles from Philadelphia. It is vulgarly called the Devil's hole. Three or four persons may enter abreast—the cave is divided into three great apartments, communicating with each other, by steep and rugged passages—it abounds with small pools and rivulets of water. At Carlisle is another, on the banks of the Cannoquoquinet about two miles north of the town. The entrance is by a semicircular archway, seven feet high in a limestone rock, of 20 feet perpendicular elevation—it extends about 95 yards—it has several small pools. This cavern is dark and damp, and must be examined by a torch light. Stalactical carbonite of lime a-

bounds in it. The writer procured some fine specimens in this cave and forwarded them to Philadelphia to exchange at their school lyceum.

There are several other caves in Cumberland county, to describe which would occupy too much space. There is also a very extensive cave in Mifflin county, called Hanniwal's cave, having a depth of 100 rods. Considerable saltpetre has been obtained from it.

There is another remarkable cave in Franklin county, near the base of the north mountain. It is described as being a very beautiful one and may be regarded as a great curiosity. The following is a brief description of its discovery and its grandeur and beauty: "A gentleman, living near the mountain, was about to dig for water. Perceiving a very large spring, issuing out of a rock at the foot of a hill of considerable height, and a kind of sink hole, he there commenced digging, hoping to come on the stream, and proceeded but a few feet, when he could plainly hear the water running, seemingly with great rapidity; and at the distance of about twenty feet from the surface, he reached it, at the lower extremity of the fissure in the rock, which immediately expanded into a large and beautiful cavern, the entrance of which is partially obstructed by large rocks which after advancing a little distance, entirely disappear, and instead of scattered rubbish, solid rocks appear enamelled with spar of different colors. In every direction are to be seen the most beautiful icicles, (stalactites) suspended from its noble, and in some places, majestic ceiling. Concretions, without number, and of almost every color, size, and dimension, are seen pointing downwards from the ceiling, and inwards from the sloping walls—some white, some red, some brown, some green, and others transparent as glass, and all solid as marble. They threaten the curious adventurer with being torn to pieces by the craggy points

if he attempts penetrating any farther, and indeed, in some places, he is obliged to proceed in a stooping position, in order to avoid them. Continuing up this subterraneous passage, you are obliged to walk in the run nearly all the way.

Parts of the run are sometimes dry, yet it is evident from its bed, and other visible marks, that at some seasons of the year, the water must flow through the different channels in large quantities.

There are, in the principal channel, several falls, which might very properly be denominated cataracts. The extent of the cave is, as yet, unknown, as it has been but partially explored; the greatest distance any person has yet penetrated, is about 800 feet, at which place there was no appearance of its termination. In ascending the cave, the eye is most agreeably struck with its grandeur. At every step new wonders presents themselves. Here, the spar is formed into trees, shrubs, &c. Which makes it have the appearance of a petrified grove. In some places, the spar is formed into the likeness of men, birds, beasts, organs, &c. And in one place, raised on a pedestal, is a striking resemblance of a half-unfurled flag. Besides these, there are hundreds of other similitudes, of which I shall not attempt a description. When we first saw them, we were only surprised at their diversity and beauty, but on a more minute examination, were struck with amazement, knowing them to be mere productions of nature, which hitherto, in solitary silence, had, in her playful moments, unseen and unheard, dressed the scene, as if for her own amusement."

There are some others in the state which we cannot notice for the want of space.

Q. What are the forest trees, and natural productions?

A. The most common trees are oak, hickory, chesnut,

walnut, maple, beech, birch, poplar, cherry, ash, elm, sassafras, sumach, elder, pine, spruce, fir, hemlock, cedar, locust, laurel, mulberry, cucumber, crabapple, thorn; there are no less than 15 varieties of oak, 6 or 7 of pine. There are also many wild grapes. We shall notice other trees not mentioned here, in the descriptions of the several counties,

Q. How is the climate ?

A. It is generally supposed that the climate of this state has undergone, and is still undergoing a very material change—that thunder and lightening are less frequent the cold of our winters, and summer's heat, are becoming less uniform—the springs colder and at times more clement; and that there is less cold in the winter and less heat in the summer than sixty or seventy years ago. Judging, however, from the late past winters, this notion seems not to be well founded.

The early part of spring is generally changeable, stormy, and cold; in April, and the early part of May, the atmosphere is damp and cool. But at the close of May all nature smiles to meet the pleasant morning of June—it is then that the country is luxuriantly dressed in its verdant garb and floral trim. While the weather is frequently lustrated by the vivid flashing cloud's rich affusion, amid the peals of loud thunder. But when the rich crowned autumn approaches, then we have the most delightful season in the year.

“Early in September, we perceive a gradual diminution of heat, cool evenings and mornings, and an agreeable temperature during the day. With a slow, but gradual increase of cold, the weather continues very pleasant till the last of October, or middle of November. About that time, the autumn is generally closed by a succession of rains, which are regarded as the harbingers of winter. It

must, however, be acknowledged, that all the seasons are subject to great, and very sudden changes.

It is said, there has been a very considerable diminution of water in Pennsylvania, that some streams, which were formerly good mill seats, are now dry. This is supposed to be owing to the removal of the forests, and consequent increase of evaporation.

It is thought that western Pennsylvania, is subject to greater changes, than the eastern part of the state. The extremes of heat and cold are known to be greater.—In the winter, the N. W. wind sweeps over the land with uninterrupted violence, having neither mountains to interrupt its force, nor sea to soften its rigour. The lakes of ice and regions of snow, over which it passes, serve to increase the intensity of cold. The prevailing wind in summer is from the S. W. Coming from the Gulf of Mexico, it follows the great valley of the Mississippi, for nearly two thousand miles, bringing with it an increased temperature. This accounts for the excess of heat and cold, with which this part of the state is visited. The whole of western Pennsylvania is remarkably healthy.

Q. What is the average quantity of water that falls yearly in Pennsylvania?

A. The average quantity of water which falls yearly is from 24 to 26 inches, according to the statement of Dr. Rush. But this would seem much too small, since a table of 20 years, from 1810 to 1829, inclusive, 14 of which were kept by P. Legeaux, Esq., at Spring Mills, and six at the Pennsylvania Hospital, gives 35.16 inches; and a table for ten years ending 1827, kept by Dr. Darlington, of West Chester, gives 49.92 inches. In the first table, the highest was 43.135 inches in 1814, and the lowest 23.354 in 1819.

In the last table, the highest was 54.1 inches in 1824, the lowest, 39.3, in 1822.

Q. Can you give me a brief account of the Government of this State?

A. The existing constitution of Pennsylvania, was adopted September 23, 1790. The legislative power is vested in a General Assembly, which consists of a Senate and House of Representatives. No person shall be a representative, who shall not have attained the age of 21 years, and have been a citizen and inhabitant of the state three years next preceding his election, and the last year thereof an inhabitant of the city or county in which he shall be chosen; unless he shall have been absent on the public business of the United States or of this state. Representatives are chosen annually. The senators shall be chosen for four years by the citizens of Philadelphia, and of the several counties, at the same time, in the same manner, and at the same place where they shall vote for representatives. No person shall be a senator who shall not have attained the age of 25 years, and have been a citizen and inhabitant of the state four years next before his election, and the last year thereof an inhabitant of the district for which he shall have been chosen; unless he shall have been absent on public business of the United States or of this state. The senators shall be chosen in districts, to be formed by the legislature; each district containing such a number of taxable inhabitants as shall be entitled to elect not more than four senators. When a district is composed of two or more counties, they shall be adjoining. Neither the city of Philadelphia, nor any county, shall be divided in forming a district. In elections by the citizens, every freeman of the age of 21 years, having resided in the state two years next before the election, and within that time have paid a state or county tax, which shall have been assessed at least six months before the election, shall enjoy the right of an elector. An enumeration of the taxable inhabitants shall be made sepa-

rately in such manner as shall be directed by law. Such enumerations have been made in 1793, 1800, 1807, &c. up to 1835. The supreme executive power shall be vested in a Governor, who shall be chosen on the second Tuesday of October, by the citizens of the commonwealth, at the place where they shall respectively vote for representatives. The person having the highest number of votes shall be Governor. But, if two or more shall be equal and highest in votes, one of them shall be chosen Governor by the joint vote of the members of both houses. The Governor shall hold his office during three years from the third Tuesday of December, next ensuing his election; and shall not be capable of holding it longer than 9 years in any term of 12 years. He shall be at least 30 years of age, and have been a citizen and inhabitant of this state seven years next before his election; unless he shall have been absent on the public business of the U. States, or of this state. No member of Congress, or person holding any office under the United States or this state, shall exercise the office of Governor. The Governor shall be commander-in-chief of the army and navy of the commonwealth, and the militia; except when they shall be called into the actual service of the U. States.—He shall appoint all officers whose offices are established by the constitution of the commonwealth, or are created by law, and whose appointments are not otherwise provided for. He shall have power to remit fines and forfeitures, and grant reprieves and pardons, except in cases of impeachment. Every bill, which shall have passed both houses of the General Assembly, shall be presented to the Governor. If he approve, he shall sign it, but if he shall not approve, he shall return it, with his exceptions, to the house in which it shall have originated, and must be first examined in that house, and sent to the other, with the Governor's objections. And if the bill be approved by two-thirds of each house, it shall, notwith-

standing the Governor's exceptions, become a law. Any bill sent to the Governor and not returned in ten days, Sundays excepted, becomes also a law.

The judicial power is vested in a Supreme Court, in courts of Oyer and Terminer and General Jail Delivery, in a court of Common Pleas, Orphan's Court, Register's Court, and a court of Quarter Sessions of the peace for each county, in Justices of the Peace, &c. The state is divided into 16 judicial circuits, over each of which is appointed a President Judge. For the Supreme Court five districts have been formed. The jurisdiction of the Supreme Court extends over the state, and the judges thereof are, by virtue of their offices, justices of Oyer and Terminer and General Jail Delivery, in the several counties. The trial by jury in issues of fact, to remain inviolate. No person who acknowledges the being of a God, and a future state of rewards and punishments, shall, on account of his religious sentiments, be disqualified to hold any office, or place of trust or profit, in this commonwealth.

Q. What is the population of Pennsylvania?

A. The following table exhibits the population of Pennsylvania, according to the late census :

Of 5 years, and under	10,	188,918
Of 10	" 15,	162,462
Of 15	" 20,	149,089
Of 20	" 30,	240,992
Of 30	" 40,	144,776
Of 40 and upwards,		561,996
Total, - - - - -		1,348,233

Of these, there are 37,930 free colored people, and 403 slaves.

The population of this state is rapidly increasing. In 1700, the population was 20,000 ; in 1757, 200,000 ; 1790.

439,373, including 3,737 slaves; in 1800, 602,545; in 1810, 800,091; in 1820, 1,049,313; in 1830, 1,348,233, and at present, (1836,) not less than 1,600,000.

What are its civil divisions, &c.

A. Pennsylvania is divided into 53 counties. The following table exhibits at one view, the names of the counties in which they were established, the area in square miles, the population for 1810, 1820, and 1830, and the number of representatives.

Counties.	when estab- lished	Area in sq. miles	POPULATION BY CENSUS.			
			1810.	1820	1830.	No. of rep.
Philadelphia City	1652	2	53722	City & co.	60468	7
Philadelphía Co.	1682	120	57468	137097	198391	8
Bucks	1682	600	32371	37812	45745	3
Chester	1692	738	39527	44451	50910	4
Lancaster	1729	923	53927	68336	76631	6
York	1749	900	31933	23759	42859	1
Cumberland	1750	545	26757	23606	29226	1
Berks	1752	874	43046	46275	53152	2
Northampton	1752	1000	39145	31765	39182	3
Bedford	1771	1520	15746	20248	24500	2
Northumberland	1772	457	36327	15124	19123	1
Westmoreland	1773	1004	25192	30510	38400	2
Washington	1781	893	26239	40038	42784	3
Fayette	1783	824	24714	27285	29172	2
Franklin	1784	756	23173	31892	35037	2
Motgomery	1784	751	29683	35793	39406	3
Dauphin	1785	523	31683	21653	25243	2
Luzerne	1788	1784	19109	20027	27379	2
Huntingdon	1787	1185	14779	20142	27145	1
Allegheny	1798	754	25317	34921	50352	4
Mifflin	1799	826	12132	16618	21690	3 b
Delaware	1789	177	14734	14810	17323	1
Lycoming	1785	2290	11006	13317	17636	2 c
Somerset	1795	1066	11295	12974	17762	2 d
Greene	1795	600	12541	15554	19028	2
Wayne	1793	720	4125	4127	7663	1 e
Adams	1800	523	15152	19370	21373	3
Centre	1800	1370	10691	13706	18979	1
Beaver	1800	646	12169	15340	24123	2
Butler	"	785	7345	15193	14681	1
Mercer	"	830	8277	11681	19729	2
Crawford	"	974	6178	9397	16030	1
Erie	"	729	3757	8553	17041	2

Warren	1800	832	827	1976	4667	1 f
Venango	"	1114	3060	4915	9470	1
Arms rong	"	941	6143	10321	17625	1
Indiana	1803	770	6214	8857	14252	1
Jefferson	1801	1230	101	561	2025	
McKean	"	1442	142	728	1439	
Clearfield	"	1425	675	2342	4803	
Potter	"	1100	23	186	1266	1 g
Tioga	"	1100	1637	4021	6578	
Cambria	"	670	2117	3287	7076	
Bradford	1810	1174		11554	19746	1
Susquehanna	1810	900		9960	16767	1
Schuylkill	1811	745		11339	20744	1
Lehigh	1812	335		18355	22253	2
Columbia	1813	574		17621	20059	1
Union	1813	551		18610	20795	
Lebanon	1813	268		16981	20557	1
Pike	1814	772		5894	4843	
Perry	1820	515		11342	14261	1
Juniata	1831	363			7672	
Monroe	1826					

--a including Monroe; b including Juniata and Union; c including Clearfield; d including Cambria; e including Pike; f including Jefferson and McKean; g including Tioga.

NOTE.—The following alphabetical *sketch* of each county—its boundaries—townships—streams, surfaces, soil, minerals, &c. &c. has been very carefully collated from the Pennsylvania Gazetteer, from Hazard's Register of Pennsylvania and from other authentic sources.

Q. What are the boundaries, townships, streams &c. of Adams county?

A. Adams county is one of the southern counties; bounded on the N. by Cumberland, N. E. and E. by York, S. by Frederick county, Maryland W. by Franklin—It is divided into the following townships, Berwick, Cumberland, Conewago, Hamilton-bar, Hamilton, Huntingdon, Germany, Franklin, Menallen, Mountjoy, Mountpleasant, Lattimore, Liberty, Reading, Tyrone, Strabane. The surface is much diversified. The soil is of various qualities, from the worst to the best. There are no navigable streams in the county—there are however some excellent

mill streams, as the Conewago, Marsh creek, Rock creek, Wilalloways, and Piney creek. Population principally Germans and settlers from New Jersey. There are some valuable minerals in this county; particular, iron and copper. Gettysburg is the seat of justice; in 1830, population was 1473. The Theological seminary of the Luthern Church, and the Pennsylvania college, both flourishing institutions are located at this place. Besides these there are other academies and schools. Stores and taverns numerous.

Q. What are the boundaries, &c. of Alleghany county?

A. Alleghany has Washington county S. and S. W., Beaver N. W.; Butler N.; and Westmoreland E. Length from E. to W. 32 miles, mean breadth 18. It is divided into the following townships, Deer, Elizabeth, Fayette, Findlay, Franklin, Indiana, Mifflin, Moon, Ohio, Pitt, Pine, Plum, Ross, Robinson, St. Clair, Versailles, —it also contains several *boroughs*. The face of this county is in a peculiar manner diversified. Though not traversed by any mountain chain, the hills are high and swelling. The soil is fertile to the highest summits, and in its natural state covered with a very dense forest. But it is the rivers and their variegated banks, which form the true decoration of this fine county; the Alleghany enters from the N. E. and the Monongahela from the S. E., and uniting at Pittsburg, form the Ohio; the latter winding to the N. W. traverses 14 miles of the western part of the county. To the rivers may be added Chartiers and many other creeks, which contribute to drain and fertilize the fine vales which spread over this beautiful country.

In its valleys and along the water courses are ash, sugar-maple, cherry, elm, different species of oak, walnut and wild grapes. It abounds with bituminous coal—this valuable mineral is found near the surface along the Alleghany and Monongahela rivers. The roads are generally

well improved. Pittsburg, the great Emporium of the west, is the seat of justice, and the incorporated part alone contained a population of 12,568 in 1830 and no doubt that Pittsburg with its suburbs contains no less than 30,000 souls at present. (*See Article Pittsburg.*)

Q. What are the boundaries and extent of Armstrong county?

A. Armstrong county is bounded on the north by Clarion creek which divides it from Venango county, E. by Jefferson, and S. E. by Indiana, S. by Kiskiminitas river which separates it from Westmoreland, and W. by Butler. Length, 45 miles, mean width, 20 miles. It is divided into the following townships: Alleghany, Buffalo, Clarion, Kittaning, Perry, Plumb creek, Redbank, Toby, Sugar-creek, Wayne, Kiskiminitas. The surface is much variegated with hill and dale, considerably broken and soil diversified—large bodies of it nearly worthless. The timber varies according to the soil,—there is black, red, white and rock oak, chesnut, hickory, ash, walnut, sugar-maple, elm, cherry, some pine and cedar, but not abundant. The county is well watered. The Alleghany river divides it into two unequal parts—The principal creeks are, Toby's, Mahoning, Crooked, Cowanshannock, Pine, Piney creek, and Buffalo. Banks of coal are found along Redbank and Mahoning creeks 12 feet thick. Alumine and copperas are found. Iron ore is abundant every where—Lead ore has been discovered. Several turnpike roads pass through this county. Kittaning is the seat of justice, its population in 1830 was 526.

Q. What are the boundaries &c. of Bradford county?

A. Bradford county is one of the northern counties, bounded on the N. by N. York, E. by Susquehanna county and S. E. by Luzerne, S. by Lycoming county, and W. by Tioga county. It is divided into the following townships. Albany, Asylum, Athens, Burlington, Canton

Columbia, Franklin, Litchfield, Monroe, Orwell, Pike, Ridgeberry, Sheshequin, Smithfield, Sprugfield, Troy, Towanda, Ulster, Warren, Wells, Windham, Wysox, Wyalusing, Tuscarora. The county is formed by two slopes the western declining rather E. of N. towards the Susquehanna—the surface of this county is mountainous, though much excellent soil skirts the streams. It has a diversified surface. The productions are all kind of timber common to Pennsylvania. The staples are grain, flour, whiskey, fruit, salted provisions and lumber. The principal streams are the Susquehanna, the Wepossening creek, Wysox, Rumnerfield, Wyalusing, Sugar, Duvals creek and Tioga river. Iron ore and coal ore the principal minerals. The Susquehanna and Tioga turnpike road passes through this county. The seat of justice is Towanda, situated on the W. bank of the Susquehanna river, 128 miles N. from Harrisburg—was incorporated in 1828.

Q. What are the boundaries, &c. of Beaver county?

A. Beaver county is bounded on the N. by Mercer, E. by Butler, S. E. by Alleghany, S. by Washington, and W. by the state of Ohio. Its greatest length along the state of Ohio is 36 miles, mean breadth 18 miles. It is divided into the following townships: North Beaver, Big Beaver, Little Beaver, South Beaver, Brighton, Chippewa, Fallstown, Greene, Economy, Hanover, Hopewell, Moon, Ohio, Shenango, New Sewickly, North Sewickly. This county belongs to the secondary geological formation; the strata throughout lying horizontal, and preserving that uniformity which distinguishes the great valley west of the Alleghany mountains. The portion of the county S. of the Ohio, and the district extending 10 miles N. of that river, have generally a hilly surface, interspersed with fine bottoms, and large tracts of level and rolling land, admirably adapted for grain and grazing farms; and par-

ticularly for raising sheep. Besides the different species of oak, and other timber common to the N. West part of Pennsylvania, as ash, sugar maple, walnut, and sycamore, the vine and mulberry grow luxuriously and spontaneously. This county is well watered. The Ohio river enters it about 14 miles below Pittsburg, and in its onward course in this county, receives the Big Beaver creek, Big Sewickly, Raccoon creek, Mahoning and Shenango rivers; the Slippery Rock and the Conequenessing creeks are the principal streams. Iron ore of various kinds has been found in many parts; and sulphur and iron in various states of combination. Limestone and bituminous coal are abundant. There are several salt water wells in this county. Roads and other similar improvements are beginning to be numerous. The seat of justice is Beaver, which contains a population of 1,000 or 1,200, and is a place of considerable business.

Q. What are the boundaries, &c. of Bedford county?

A. Bedford county is bounded on the N. and N. E. by Huntingdon, E. by Franklin, S. Maryland, W. by Somerset. Greatest length from the Maryland line to the northern angle, 52 miles. It is divided into the following townships: Aair, Bedford, Belfast, Bethel, Colerain, Cumberland Valley, Dublin, Greenfield, Hopewell, Londonderry, Napier, Providence, Southampton, St. Clair, Woodbury. The surface of the county is very mountainous. The Cove and Tuscorara mountains are on the E.; proceeding thence W. we cross Scrub Hill, Sideling Hill, Town Hill, Clear Ridge, Warrior's Ridge, Tasseys Mountain, Denning's Mountain, Will's Mountain, and Buffalo Ridge. Though the country is generally broken, still there are some fine limestone farms, well cultivated, especially those near M'Connellstown, Friends' cove, and Morrison's cove. The timber is chiefly white oak, chesnut, hickory, pine.

and sugar maple. This county is wholly of transition formation, and abounds in mineral wealth, as bituminous coal and iron ore are in abundance. Wheat, rye, and oats, are their universal crops. Bedford is the seat of justice, on the great road leading from Philadelphia to Pittsburg. In 1830, it contained 879 inhabitants.

Q. What are the boundaries &c. of Berks county?

A. Berks is bounded by Lehigh county on the N. E., Montgomery on the E., Chester on the S. E., Lancaster on the S., Lebanon on the S. W., and the Kittatinny mountain on the W. and N. W., separating it from Schuylkill.— Mean length, 34 miles; breadth, 30 miles. It is divided into the following townships: Amity, Alsace, Albany, Bethel, Breckneck, Caernaroon, Cumru, Colebrookdale, Douglass, Earl, East District, Exeter, Greenwich, Heidelberg, Hereford, Longswamp, Lower Bern, Maiden creek, Maxatawney, Oley, Pike, Richmond, Robeson, Ruscomb, Rockland, Manor, Tulpehocken, Union, Upper Bern, Windsor, Upper Tulpehocken.

The face of this fine country is greatly diversified; bounded on the N. W. by the Kittatinny, and S. E. by the S. E. chain of mountains, it contains part of two mountain valleys. The general slope is to the southeastward, and is traversed in that direction by the Schuylkill river, which breaks through the Blue Ridge at Reading. The latter chain traverses Berks in a southwestern direction, dividing the county into two unequal valley sections. The lower and lesser, lies between the Blue Ridge and Southeast mountain, and widens from N. E. to S. W. from three to fifteen miles. The section above the Blue Ridge has a nearly equal breadth of eighteen miles, something more than a third of which is on the great limestone strata which flanks the Blue Ridge on the northwestern side. The limestone tract is the most fertile, but the general character of the soil of the county

is that of productiveness, and the staples are numerous and valuable. The mean level of the arable soil of Berks is about three hundred feet above the level of tide water in the Delaware river. The seasons of inflorescence, foliage, and of harvest, are sensibly different above and below the Blue Ridge.

There are all kinds of timber usually common to this part of Pennsylvania. This county is well watered;—the Schuylkill river divides it into almost two equal parts. In its course in this county, the Schuylkill receives from the W. Irish, North Kill, Little North Kill, Tulpenhocken, Spring, Cacoosing Wymissing, Angelica, Allegheny, Hay and Mill creeks, and from the E. Maiden, Dry, Roush, Manokesy, and Manatawney creeks. Some of the head waters of the Lehigh and Swatara have their sources in this county. There is a vast quantity of iron manufactured in this county. In three years time, eleven furnaces have produced 14,411 tons of pig iron, and 3,587 tons of casting. I have seen some fine specimens of copper ore brought from this county. Roads and other public improvements are numerous. Reading is the seat of justice; in 1830 it contained 5631 souls. (*See description of Reading.*)

What are the boundaries &c. of Bucks county?

A. Bucks county is bounded by Philadelphia county S., Montgomery S. W., Lehigh and Northampton counties, N. W. Delaware river separating it from New Jersey. Greatest length 42 miles mean breadth 13 miles. It is divided into the following townships, Bristol, Bensalem, Bedminster, Buckingham, Doylestown, Durham, Falls, Haycock, Hilltown, Lower Makefield, Upper Makefield, Middletown, Milford, Newtown, New Britain, Northampton, Nockanixon, Plumstead, Richland, Rockhill, Solebury, Southampton, Springfield, Tinicum, Warminster, Warrington, Warwick, Wrightstown. The surface is

pleasantly broken into hill and dale, and the northwestern border formed, by one of the minor chains of the Appalachian system. Of the large creeks which rise and terminate in this county, the principal are the Neshamony in the southern, and Tohicken in the northern part. The limestone region and alluvial flats on the Delaware, produce very fine crops of wheat. It is well watered—the principal streams are the Delaware, Neshamony, Perkio-men and Tohicken creek, and Jugham's spring. "There is a valuable mine of plumbago, at blackhead, in this county which is very productive. It is on the summit of a hill in Southampton township, and has been perforated to the depth of 100 feet. By the aid of two pumps, one horse, and 6 workmen, 25,000 dollars worth has been raised within the space of three years. The plumbago of this mine is said to be of a superior quality, and the best yet discovered, excepting that of one mine in England. It is sold, for from fifteen, to forty-five cents per pound.

Doylestown is the seat of justice—the population in 1830, was 1,777. There are rising of 100 dwelling houses, 5 stores and 6 taverns in it.

Q. What are the boundaries, &c. of Butler county?

A. Butler county, is bounded by Alleghany S., Beaver, W., Mercer N. W., Venango N., and Armstrong E., length 35, mean breadth 23 miles—is divided into the following townships, Butler, Buffalo, Centre, Clearfield, Conequenessing, Cranberry, Donegal, Mercer, Middlesex, Muddy-creek, Parker, Slippery Rock, Venango. The face of the country is generally favorably disposed for agriculture. The timber consists of white, black, and other oaks, beech, maple, blackash, sugar maple, cherry, &c. It is well watered. The Alleghany river touches its N. E., and S. E. boundaries, and receives from it Lowry's, Crawford's, Redick's, and Jones' runs, Bear creek, several branches of Big Buffalo creek, and the Little Buffalo creek. West-

ward, it is drained by Slippery Rock creek and its several branches, Muddy creek, Conequenessing and Brush creeks, tributaries of the Big Beaver; and by a branch of the Big Sewickly creek, which flows into the Ohio.

This county, like many others in Pennsylvania, has been the residence of the mammoth. In 1819, whilst digging the well at the salt-works, about one and a half mile N. E. of the town of Butler, the grinder of one of these huge animals was found, four feet below the *surface of the rock*, among several fragments of much decayed bones. Its weight was five pounds, length seven inches.

Butler is the seat of justice—the population in 1830, was 580.

Q. What are the boundaries, &c. of Cambria county?

A. Cambria is bounded E. by the Alleghany chain which separates it from Bedford and Huntingdon, N., by Clearfield, W., by Laurel Hill, separating it from Indiana, and Westmoreland, and S., by Somerset. Length from S. to N. 36 miles, mean breadth 20 miles. It is divided into the following townships, Alleghany, Cambria, Clearfield, Conemaugh, Jackson, Munster, Loretto, Summerhill, Susquehanna. The surface is hilly, rocky, and in part mountainous, with a soil of middling quality. Almost every species of timber abounds on the mountains, except the white oak—some of the trees grow to a large size. It is well watered, by the Conemaugh, Stony creek, Clearfield and Blacklick creeks. There is iron ore here, and coal is abundantly found in various parts, but more particularly in the southern division. The turnpike road from Huntingdon to Pittsburg passes through this county. Ebensburg is the seat of justice; in 1830 the population was 270.

Q. What are the boundaries, &c. of Centre County?

A. Centre county is bounded N. and W., by Lycoming, W. branch of the Susquehanna, which separates it from

Clearfield and Lycoming W. and N. W., by Huntingdon and Mifflin, S., and by Union, E., Length 58, breadth 36 miles. It is divided into the following townships; Bald Eagle, Eoggs, Ferguson, Gregg, Hains, Howard, Half-moon, Logan, Lamar, Miles, Potter, Rush, Patton, Spring, Walker. It is mountainous and rocky, though the soil is good in many places,—the mountains abound with fine timber. It is not well watered. The mineral resources are good. There are several turnpikes running through it. Bellefonte is the seat of justice; population in 1830, was 699.

Q. What are the boundaries, &c. of Chester county?

A. Chester county is bounded by Lancaster county W., Berks, N. W., Schuylkill river, which separates it from Montgomery, N. E., Delaware county E., Newcastle county in the state of Delaware S. E., and Cecil county, Maryland S. Length 44 miles, mean breadth 18 miles. It is divided into the following townships, Bradford W., Bradford, E., Birmingham, Brandywine, Caln E., Caln W., Charlestown, Coventry, Eastown, Fallowfield E., Fallowfield W., Goshen E., Goshen W., Honeybrooke, Kennet, London Grove, London Britain, Oxford Upper, Oxford Lower, Marlborough E., Marlborough W., Newlin, New Garden, New London, Nottingham E., Nottingham W., Londonderry, Penn, Nantmeal E., Nantmeal W., Pike-land, Pennsbury, Sadsbury, Schuylkill, Tredyffrin, Thornbury, Uwchlan, Vincent, Whiteland E., Whiteland W., Willistown, West-Town. The surface is very diversified; the eastern part rolling, rather than hilly, and in some places level, but the central and western part hilly, and in many places very mountainous. The soil is generally varied from rocky and sterile to highly fertile; more than 600,000 bushels of lime are annu-

ally used in this county, for manure. The timber is not so very strong. The principal streams are Brandywine and French creek.

Chester county presents to the mineralogist a rich field for investigation. Her limestone, serpentine and gneis, the predominant rocks, contain inexhaustible beds of interesting minerals, and the many quarries in operation greatly facilitate the means of procuring them. These circumstances, with the polite attention manifested to strangers by the inhabitants, and the admirable hospitality which characterizes them, furnish strong inducements to the mineralogist to visit the county.

The roads are generally good and traverse the county in all directions. West Chester is the seat of justice; population in 1830, was 1,258 (*See description of West Chester.*)

Q. What are the boundaries, &c. of Clearfield county?

A. Clearfield county is bounded by Cambria S., Indiana S. W., Jefferson W. and N. W., M'Kean N., Lycoming N. E., the west branch of the Susquehanna river E., separating it from Centre, and Mushannon creek S. E., separating it from the southwestern part of Centre. Length from S. to N. 45 miles, mean breadth 32. It is divided into the following townships: Brady, Bradford, Beccaria, Chest, Covington, Decatur, Fox, Gibson, Lawrence, Pike. Its surface is broken and hilly—even mountainous; but the mountains do not form regular chains or ridges, but are broken and turned in all directions. The soils are as various as the surface. The limestone and alluvial lands of the valleys are excellent. The timber is of all the varieties indigenous to the country. The county is extremely well watered. Bituminous coal and iron ore abound.—Several turnpike roads pass through it. Clearfield is the seat of justice, having in 1830 six hundred and seventeen of a population.

Q. What are the boundaries, &c. of Columbia county?

A. Columbia county is bounded by Northumberland W., Lycoming N. W., Luzerne N. E., Susquehanna S. E., and Northumberland S. and S. W. Length from S. to N. 35, mean breadth 20 miles. It is divided into the following townships: Greenwood, Madison, Hemlock, Brown, Briar creek, Liberty, Sugarloaf, Mountpleasant, Mifflin, Limestone, Derry, Catawissa, Mahoning, Fishing creek. The surface is uneven, and diversified by mountain, hill, and valley. The soil of the alluvial bottom of the Susquehanna is good, and there is considerable limestone in this county. It is well watered. It abounds in mineral wealth. The anthracite coal and iron ore found in it, are of an excellent quality. Roads and other improvements are not wanting. Danville is the seat of justice, its population in 1830 was about 700.

Q. What are the boundaries, &c. of Crawford county?

A. Crawford county is bounded by Erie N., Warren E., Venango S. E., Mercer S., and by Ohio W. and S. W. Length 43 miles, mean width 22. It is divided into the following townships: Meadville, Randolph, Oil creek, Troy, Athens, Rome, Sparta, Richmond, Bloomfield, Rockdale, Woodcock, Venango, Cussawago, Spring, Beaver, Conneaut, Hayfield, Vernon, Sadsbury, North Shenango, South Shenango, Fallowfield, Greenwood, Fairfield, Sommerhill.

The surface of the county is undulating, and the soil generally of a good quality, and there is little or none worthless in the county. It is well watered and timbered. The principal streams are French creek, Oil, Muddy, Woodcock, Big and Little Sugar and Cussawago creeks, tributaries of French creek. The principal minerals are iron and salt. There is another production found in this county called Seneca Oil. Hollow places are made in the low spongy ground, bordering on the creek, which

being filled with water, the oil swims on the top, and is taken off and used for lamps and various other purposes. Considerable quantities are annually sent to the eastern markets. Meadville is the seat of justice. Population in 1830, 1094; at present 1600.

Q. What are the boundaries, &c. of Cumberland county?

A. Cumberland county is bounded N. W. and N. by the Kittatany, or as there locally named, North mountain, which separates it from Perry, Susquehanna river separating it from Dauphin, E., York county S. E., Adams S., Franklin S. W. Length 34 miles, mean breadth 16, and area 544 square miles. It is divided into the following townships: Allen, Dickenson, East Pennsborough, Frankford, Hopewell, Mifflin, Monroe, Newton, North Middleton, Silverspring, Southampton, South Middleton, West Pennsborough. This county, from its peculiar situation, belongs in part to the great central transition formation of the state, and partakes of the singular structure which distinguishes this valley in its whole course; the S. eastern half is composed of limestone, and the N. western of aluminous slate. The surface of the country is determined by the nature of its base. The limestone country is generally level, and the soil much superior to that of the slate. The water is also more regularly distributed in the slate than in the limestone formation. The several streams that water the interior of it are the Conodoquinet, Greenspring, Bigspring, Silverspring, Cedarspring, Letartspring, and the Yellow Breeches creek on the S. E. We might here also notice the Sulphur Spring at the foot of the Blue mountain. We have iron ore, and it chiefly abounds, if not wholly, in the limestone formation. The turnpike road from Harrisburg to Chambersburg, crosses the county S. W. by the borough of Carlisle; and another road directed towards Baltimore, runs

from Carlisle S. E. by Petersburg and Abbottstown, in Adams county, and by Hanover into York county, to the state line. Carlisle is the seat of justice. Here is Dickinson College, under the auspices of the Methodist Episcopal church,—at present it is in a flourishing condition. The population of Carlisle in 1830 was 3710.

Q. What are the boundaries, &c. of Dauphin county?

A. Dauphin county is bounded by Mahantango creek, which divides it from Northumberland N., by Schuylkill N. E.; Lebanon E., Conewago creek, which separates it from Lancaster S., and by the Susquehanna river, which separates it from York S. W., and from Cumberland and Perry W. Length 38 miles, mean breadth 16. It is divided into the following townships: Lykens, Mifflin, Upper Paxton, Halifax, Jackson, Rush, Middle Paxton, Susquehanna, Lower Paxton, Hanover, Swatara, Derry, Londonderry. The surface of this county varies much in fertility; one-fourth may be estimated mountainous, and altogether unfit for cultivation. It is well watered; the principal streams are the Swatara, Paxton, Clark's, Armstrong's and Wiconisco creeks; and the west is watered by the Susquehanna river. Anthracite coal is abundant in this county. There are three turnpike road companies. (See article, *Turnpikes*.) Harrisburg is the seat of justice. Population in 1830, 4312. (See article *Harrisburg*.)

Q. What are the boundaries, &c. of Delaware county?

A. Delaware county is bounded by Chester county W. and N. W., Montgomery N. E., Philadelphia county E., Delaware river, separating it from Gloucester county, N. Jersey, S. E., and New Castle county, S. Length 20 miles, mean breadth 11. It is divided into the following townships: Aston, Bethel, Birmingham, Chester, Concord, Upper Chichester, Lower Chichester, Darby, Upper Providence, Nether Providence, Marple, Springfield, Newtown,

Middletown, Tinicum, Upper Darby, Ridley, Havertford, Thornbury, and Radnor. This county, with the exception of a narrow margin of alluvion, along the Delaware, pertains to the primitive formation. The soil is good, and under the care of its industrious inhabitants is scarce surpassed in fertility by any in the state. The surface of the country above the alluvion is rolling, and becomes somewhat hilly towards the west. The principal streams are Cobb's, Darby, Crum, Ridley, Chester, Hook, Muskinipates, and Brandywine creeks; these all flow into the Delaware. A mine of copper ore has been opened on Chester creek, about a mile above the town of Chester. The ore *is said* to contain 53 per cent. of copper, 48 ounces of silver in every 100 pounds, and one grain of gold in each ounce of the ore. The sulphuret of molybdena is also found here in large quantities.—Chester is the seat of justice. Population in 1830 was 848.

Q. What are the boundaries, &c. of Erie county?

A. Erie county is bounded by Ashtabula county, O., W., Lake Erie W. and N., Chataque county, N. Y., N.E, Warren county, E., Crawford county S.

Greatest length along Crawford county, forty-five miles, mean breadth 17; area 765 square miles. It is divided into the following townships: Amity, Beaver Dam, Conneaut, Conneautte, Concord, Elk Creek, Fairview, Greenfield, Harbor Creek, Le Bouef, McKean, Mill Creek, North East, Springfield, Union, Wayne, Waterford, Venango. The surface is undulating, its soil sandy loam, clay, gravel, and tolerably productive, but better adapted for grass than grain. The principal streams flow into Lake Erie. These are the different "*mile*" creeks, Walnut, Elk, Crooked and Raccoon creeks, &c. Erie is the seat of justice, population in 1830, 1465.

Q. What are the boundaries, &c. of Fayette county?

A. Fayette county is bounded by Alleghany county, Md., S. E., Preston and Monongalia counties, Va., S., by Monongahela river, which separates it from Greene county, W., and Washington N. W., by Westmoreland N. and Somerset, E. It approaches a square of 28 miles each side. It is divided into the following townships: Connellsville, Bullskin, Dunbar, Franklin, George, German, Henry Clay, Luzerne, Menallen, Redstone, Saltlick, Springhill, Tyrone, Union, Washington, and Wharton. The county lies partly in the central position, and partly in the secondary formation. Its surface, from the centre E. is mountainous, and every where hilly. The soil is various; that of the east part, on the mountains, is of slate and gravel, in the western part it consists of loam. Limestone is found near the surface in some places, and in others it lies deep.

It is well watered. The Monongahela, with a rather crooked channel, winds a navigable stream along the western border. The Youghioghany, after piercing a chain of mountains, enters Fayette from the S. E., and breaking through hills and mountains, traverses it flowing to the N. W. The channel of the Youghioghany is part of the projected route of the Chesapeake and Ohio Canal. Iron ore abounds. The seat of justice is Union. Its population in 1830 was 1352.

Q. What are the boundaries, &c. of Franklin county?

A. Franklin is bounded by Bedford W., Huntingdon N. W., Mifflin N., Perry and Cumberland N. E., Adams E., and Washington, Md., S. It is divided into the following townships: Antrim, Fannet, Franklin, Greene, Guilford, Hamilton, Letterkenny, Lurgan, Metal, Montgomery, Peters, Southampton, St. Thomas, Warren, Washington.

The valley between the mountains affords much diver-

sity of aspect and soil. The greater part is limestone land of good quality, well watered by springs, and in a high state of cultivation. The general character of the land is undulating, very little hilly or broken that may not be subjected to the plough. The prevailing forest trees are white, black, red, swamp and chesnut oak, chesnut, poplar, elm, black and white walnut, hickory, acacia or locust, maple, sycamore, &c. The principal streams of the county have their sources in the mountains not far from their summits, whence they flow towards the middle of the valley, and nearly all unite in forming the Conecocheague creek, a large stream which empties into the Potomac at Williamsport, in Maryland. The Antietam creek rises in the South mountain and parts contiguous, and flows southward also into Maryland. The Conedoquinet creek springs from the North mountain, and runs northward for several miles, whilst west Conecocheague on the west of the intervening mountain, has an opposite, though nearly a parallel course.—These main trunks and their tributary branches, intersect the country in all directions, and furnish a supply of water not only for agricultural, but for manufacturing purposes, to a great extent. Iron ore of the best quality abounds. A tradition from the first white settlers reports, that the Indians obtained lead from these hills, but it has not yet been discovered. Several turnpikes pass through this county. Chambersburg is the seat of justice. Population in 1830, 2794.

Q. What are the boundaries, &c. of Greene county?

A. Greene county is bounded by Washington county N., by Monongahela river separating it from Fayette, E., by Monongalia county, Va. S., Tyler county, Va. S. W., and Ohio county, Va. W. Length from E. to W. 32 miles, mean breadth 18. It is divided into the following town,

ships: Aleppo, Cumberland, Centre, Dunkard, Franklin, Greene, Jefferson, Morgan, Morris, Monongahela, Rich Hill, Wayne, and Whiteley.

The surface of the county is greatly diversified by hills and dales, and the soil varies from the richest river bottoms to the poorest gravel ridges. The county is very well watered; the principal streams are Dunkard, Big Whitely, Little Whitely, Muddy and Ten Mile creeks, all of which flow eastward into the Monongahela river. Wheeling and Fish creeks rise by several branches and flow westward to the Ohio; their sources are not distant from each other. The valleys of these streams are among the most delightful of Pennsylvania, rich, and where the axe has not done its work, covered with every variety of timber indigenous to the west, of the largest growth. This county has a due proportion of the three minerals, *coal, iron, and salt*, which abound in western Pennsylvania.—Waynesburg is the seat of justice; the population not exceeding 700.

Q. What are the boundaries &c. of Huntingdon county?

A. Huntingdon county is bounded S. W., by Bedford, N. W., by Alleghany mountains, separating it from Cambria, N. by Centre, N. E., by Mifflin, and S. E., by Tuscarora mountains separating it from Franklin. Length, diagonally from S. E. to N. W., 58 miles, mean breadth 22. It is divided into the following townships: Alleghany, Antet, Barre, Dublin, Franklin, Frankstown, Hopewell, Henderson, Morris, Porter, Shirley, Springfield, Tell, Tyrone, Union, Warriormark, West Township, Petersburg, Woodberry, Walker. This county is wholly within the transition region of the state, and in one of the most mountainous parts. The soil partakes of all the shades of quality, from the prolific limestone to the barren decomposition of the conglomerate. The county is abundantly watered

by the Juniata river, and its tributaries; the Frankstown and Raystown branches, the Aughwick and Tuscarora creek. The most important minerals are iron, lead, bituminous coal, salt and alum. The best kind of iron, are *pipe ore*, *rock ore*, and *needle ore*; there is also *nest and top ore*, as the miners call it. Huntingdon is the seat of justice; population in 1830, was about 900.

Q. What are the boundaries, &c. of Indiana county?

A. Indiana county is bounded by Armstrong W., and N. W., by Jefferson N., Clearfield N. E., Cambria E. and S. E., and by Conemaugh river, separating it S. from Westmoreland. Length 35 miles, mean width 23. It is divided into the following townships, Wheatfield, Armstrong, Blacklick, Centre, Conemaugh, Greene, Mahoning, Washington, Young. Lying in the great western secondary geological formation, the county has the surface common to the greater portion of Pennsylvania. The hill table land, originally level, is cut in every direction by the streams which traverse it, and by occasional and temporary floods, and its general surface is therefore hilly. The soil is loam, varied by a common mixture with sand, gravel, and clay; with these, vegetable mould is blended in the valleys, in various proportions, producing in many places exuberant fertility. Coal and salt are abundant. Indiana is the seat of justice; population in 1830, was 433.

Q. What are the boundaries, &c. of Jefferson county?

A. Jefferson county is bounded by Indiana S. Armstrong and Venango W., McKean N. E., and Clearfield E. and S. E. Length 46 miles, mean breadth 26. It is divided into the following townships, Perry, Pine creek, Rose, Ridgeway, Young. Like the rest of the N. W. part of Pennsylvania, the country is hilly—some of the valleys are fertile; but the soil is for the most part only ordinary. It is abundantly watered. Iron ore and coal abound.

Centre is the seat of justice; population not exceeding 500.

Q. What are the boundaries, &c. of Juniata county?

A. Juniata county is bounded by Perry S., Huntingdon S. W. and W., Mifflin N. W. and N., and the Susquehanna river separating it from Dauphin county E. Length 50 miles, mean breadth 14. It is divided into the following townships, Fermanagh, Greenwood, Milford, Turbett, Lack, Tuscarora. In this county we find barren mountains, underlayed by limestone, with intervening fertile valleys. It is well watered. There is iron ore in this county. Mifflin is the seat of justice; population not exceeding 500.

Q. What are the boundaries &c. of Lebanon county?

A. Lebanon county is bounded by Dauphin W, and N. W., Schuylkill N., Berks N. E. and Lancaster S. E. The greatest length of Lebanon is diagonal by 29 miles from the eastern to the western angle; mean width 12. It is divided into the following townships, Londonderry, Annville, Jackson, Lebanon, East Hanover, Heidleberg, Bethel, Swatara. The whole county is included in the fine valley of Kittatinny, and similar to other parts of this physical region, the side next the Blue Ridge is based on limestone, and that towards the Kittatinny on clay slate. Soil generally excellent. The surface though bounded by the Kittatinny N. W., and Blue Ridge S. E. is not even very hilly, some part is very level. The principal streams are the Great and Little Swatara, which flow westerly to the Susquehanna, and the Tulpehocken, which by an easterly course seeks the Schuylkill. On the south, the Conewago, Great and Little Chiques, Hammer and Seglock creeks have their sources in the hills. The southern hills have great abundance of iron ore. The county is traversed in every direction by good roads. Lebanon is the seat of justice; population in 1830, was 1,826.

Q. What are the boundaries, &c. of Lancaster county?

A. Lancaster county is bounded by the eastern Conewago creek separating it from Dauphin N. W., by Lebanon county N., Berks N. E., Chester E., Cecil county of Maryland S., and Susquehanna river separating it from York county S. W. Lines drawn over this county from its S. E. angle on Octarara creek a little W. of N. to its extreme northern angle on Lebanon and Berks, or N. W. parallel to Susquehanna river, to its extreme western angle at the mouth of the Conewago, are very nearly equal and 43 miles in length, and the area being within a trifle of 1,000 square miles, the mean width will be about 23 miles. It is divided into the following townships, Brecknock, Bart, Cocalico, Colerain, Caernarvon, Conestoga, E. & W. Donegal, Dromore, Earl, Elizabeth, West Hempfield, East Hempfield, Little Britain, Lancaster, Lampeter, Leacock, Manheim, Mount Joy, Manor, Martick, Raphoe, Sadsbury, Salisbury, Strasburg, Warwick. Lancaster county is intersected by three ranges of hills, Mine ridge, Eplrata ridge, and Conewago ridge.

The surface is undulating, under a very high state of cultivation, interspersed with some elegant country seats. When travelling the rail-road in the spring, we are constantly delighted with scattered flowers, and trees either in blossom, or beginning to shoot forth the tender fruit, meandering streams, and wide spreading fields of verdure, promising a rich reward to the waiting husbandman. The beauties of this charming region of cultivation, are, apparently, not a little increased by the intervening cliffs, which extend along the road; the rich landscape now opening, and now again receding from view. In some places the road is excavated through massy rocks, to a great depth, in others, through deep hills of gravel. Some of the beautiful bridges we pass are over streams, and some over deep and extensive vales. Roads

are frequently carried over our heads, and we are often carried over the roads.

Its geological features are strongly marked, the southern part is underlaid by limestone, while the northern is covered by transition red sand stone. The limestone of the southern half furnishes the inhabitants with an abundance of manure, with materials for buildings, and beautiful marble for ornamental purposes. This portion also produces great quantities of the materials from which Epsom salts are made. A very large quantity of this article, is annually made in this county. Iron ore is found in abundance.

Crossing the county from E. to W., S. of the parallel of Lancaster, we have Octorara creek, which separates it from Chester, the N. and W. branches of that stream, the Conewingo creek, Fishing creek, Tucquean creek, the Pecquea, which runs S. W. over the county, receiving Beaver creek, and Little Beaver creek, and many smaller streams—the Conestoga creek, which, rising in Chester county, flows by a western course into Warwick township, and thence S. W. by the city of Lancaster to the Susquehanna river, being the recipient of many excellent streams which increase its waters from either hand, the chief of which are the E. Branch, Cocalico, Trout, Middle and Hammer creeks, and the Little Conestoga creeks; a slack water navigation has been made on the Conestoga creek—the Big and Little Chiques and the Conewago creek, which separates Lancaster from Dauphin county. All these streams afford advantageous mill sites, and are generally and usefully improved. Iron ore abounds; copper ore has been discovered in mine hill.

We cannot conclude this article, imperfect as it is, without noticing Litiz. This is a Moravian settlement eight miles north of Lancaster. It contains 80 or 90 dwelling houses, a Male Seminary well conducted, under the aus-

pices of Mr. John Beck, an able instructor ; a Female Seminary, a brothers and sister's house, &c.

Lancaster is the seat of justice ; population in 1830 was 7,704. (*See Article Lancaster.*)

Q. What are the boundaries, &c. of Lehigh county ?

A. Lehigh county is bounded by Schuylkill county W. by Northampton N. W., N. and N. E., and by Bucks S. E. Length 28 miles, mean width 13. It is divided into the following townships, Hanover, Heidleberg, Lowhill, Linn, Macungee, Northampton, N. Whitehall, Salisbury, S. Whitehall, Upper Milford, Upper Saucon, Weissenberg. The surface of this county is highly picturesque and varied. Except the 3 southeastern townships, Upper Milford, and Upper and Lower Saucon, the residue of the county lies in the valley between the South mountain, and the Blue or Kittatinny mountain. The valley section is nearly equally divided between the limestone and the clay slate formation. The soil, particularly on the limestone tracts is excellent. The county is well watered, the principal streams are, Lehigh river, Trout, Antelauny, Coplay, Jordan, Cedar, Saucon creeks. One of the branches of Perkiomen rises in this county. There is iron ore in this county. Northampton or (Allentown) is the seat of justice ; population in 1830, was 1,544.

Q. What are the boundaries, &c. of Luzerne county ?

A. Luzerne county is bounded by Columbia S.W., Lycoming W., Bradford N. W., Susquehanna N., Wayne N. E., Pike E., Northampton S. E., and Schuylkill county S. Length from S. to N. 50 miles, mean breadth 36. It is divided into the following townships, Abington, Braintrim, Blakely, Covington, Dallas, Eaton, Exeter, Falls, Greenfield, Hanover, Huntingdon, Kingston, Nicholson, Newport, Nescopeck, Northmoreland, Pittstown, Plymouth, Providence, Salem, Sugarloaf, Union, Wilksbarre, Windham, Tunkhannock, Lehmen, Carbondale. The county per-

tains wholly to the great central formation of the state. The soil is so various in its quality, as to be not easily reducible to any general character. The valleys are commonly rich, arable land, yet differing much in their fertility, and the mountains invariably sterile, and unsusceptible, of cultivation. The surface is very mountainous, and the ridges run parallel to each other, from S. W. to N. E. like all the Atlantic chains of the continent. The intervening valleys, which vary much in width, are finely improved.

The principal streams are the Susquehanna and its tributaries—Mahoopenny, Bowman's, Lackawannock, Wapwallopen, Nescopeck, creeks. Iron ore and anthracite coal are the principal minerals. Wilkesbarre is the seat of justice; population in 1830, was 2,232. NOTE—"No portion of the state recalls more interesting historical recollections, than Luzerne county. Its beautiful and rich valleys have been a favorite resort of the aborigines, for which they have contended among themselves, and with the white man. It was early and duly appreciated by the Connecticut settlers, who moistened the soil with their blood in maintenance of their possessions, though founded on a mistaken title. It has been the seat of the only civil war, which stains the annals of our colonial history, and has displayed as much heroism as any portion of the commonwealth, and suffered more than any other in support of the revolution. *Pa. Gaz.*

Q. What are the boundaries, &c. of Lycoming county?

A. Lycoming county is bounded by Clearfield south west, McKean west, Potter northwest, Columbia south east, and Union and Centre south. Length from east to west 106 miles, and the area being 2,332, the mean breadth must be 22 miles. It is divided into the following townships: Adams, Bald Eagle, Brown, Chapman, Cherry, Clinton, Dunstable, Elkland, Fairfield, Franklin, Hepburn,

Jackson, Loyalsock, Lycoming, Muncy Creek, Mifflin, Muncy, Moreland, Nippenose, Pine Creek, Penn, Shrewsbury, Washington, Wayne. The face of this county is very broken, and similar to Luzerne, traversed by several mountain chains stretching from southwest to northeast. Though the general slope is eastward, the western part of Luzerne actually declines towards the Appalachian system. In general features the resemblance is very strong between Luzerne and Lycoming; the arable part of both being narrow river, or mountain valleys. The proportion of good soil in Lycoming is perhaps rather more, comparatively, than in Luzerne.

The principal streams are the Susquehanna river, Muncy, Loyalsock, Lycoming, Pine, Kettle, Sinnemahoning, Cooks, Lorry, Queenshohoque creeks, &c. Iron ore and coal are the principal minerals. Williamsport is the seat of justice; population in 1830, not exceeding 600.

Q. What are the boundaries of M'Kean county?

A. M'Kean county is bounded by Potter E., Lycoming S.E., Clearfield S., Jefferson S.W., Warren W., Cattaraugus county, New York, N., and Alleghany county of New York, N. E. Length 42 miles, mean width 32. It is divided into the following townships: Burlington, Ceres, Cooper, Ogden, Sergeant, Shippen, Walker, Keating, and Liberty. The surface is hilly, in part it is mountainous, and the soil generally of middling quality. The principal streams are the head waters of the Alleghany river, Potatoe creek, Willow, Sugar, and Kinjua creeks, and several branches of Teonista creek. It abounds with coal, iron ore, and salt. Smethport is the seat of justice, and contains about 50 dwellings.

Q. What are the boundaries, &c. of Mercer county?

A. Mercer county is bounded N. by Crawford, N. E. by Venango, S. E. by Butler, S. by Beaver, and W. by Trumbull county, Ohio. Length from S. to N. 34 miles,

mean width 25. It is divided into the following townships: Cool Spring, Delaware, French Creek, Lackawannock, Mercer, Mahoning, Neshannock, Pymatuning, Salem, West Salem, Sandy Lake, Shenango, Slippery Rock, Sandy Creek, Wolf Creek, Springfield.

The geological structure of the county belongs to the secondary formation; the horizontal strata of which have been cut by the streams to a considerable depth in various directions, and the plain has thus been converted into a rolling surface, and in many places assumes a hilly character. The county is well watered by the Shenango, Crooked, Lackawannock, and other creeks. Bituminous coal is found in abundance in every township in the county; we have not learned whether its usual concomitants, iron and salt, in this region, attend it. Copperas is found in great quantities near the town of Mercer.

Mercer is the seat of justice. The population in 1830 was 656.

Q. What are the boundaries, &c. of Mifflin county?

A. Mifflin county is bounded by Centre north, Union N. E., Juniata county E. and S. E., and Huntingdon S. W. and S. W. Length from S. W. to N. E., 42 miles, mean breadth 12. It is divided into the following townships: Derry, Armagh, Union, Wayne, Decatur, and Walker.

This county is near the centre of the great transition formation of the state. It is surrounded by mountains, and traversed by several ranges of lofty hills. Crossing it from the south, we have Black Log mountain and Blue ridge, north of which flows the Juniata river, through Juniata valley, bounded northward by Limestone ridge, Jack's mountain, and Path Valley mountain. The whole of this mountainous region is underlaid with limestone, which being near and on the surface in the valleys, renders them highly fertile. It is not as well watered as ma.

ny of the other counties are. Iron ore abounds in many parts of the county, but more particularly in Union, Derry, and Wayne townships. Its quality is that well known and highly appreciated, as Juniata iron. In the limestone valleys, there are some caves such as are common in limestone countries. That in Wayne township, called Han-
iwal's cave, is, we believe, the most extensive, having a depth of more than 100 rods. Considerable quantities of Salt petre have been obtained from it at sundry times.

Lewistown is the seat of justice. Population in 1830, 1480.

Q. What are the boundaries, &c. of Monroe county?

A. No actual survey having been made as yet, we cannot give the exact boundaries, nor any other particular information. The soil, &c., same as described in Northampton and Pike counties, which see.

According to an act passed and approved the first day of April, 1836, the townships of Ross, Chesnuthill, Tobyhanna, Pocono, Hamilton, Stroud, and Smithfield, north of the Blue mountain, in Northampton, and Coolbaugh in Pike county, are erected into a county called Monroe.

Q. What are the boundaries, &c. of Montgomery county?

A. Montgomery county is bounded by Philadelphia county S. E., Delaware county S., in part an artificial line and in part the Schuylkill river, separates it from Chester S. W., on the N. W. a range of hills, or rather a minor chain of mountains, separates it from Bucks, and on the N. E. it is bounded by Bucks. This county is nearly a parallelogram of 24 by 16 miles. It is divided into the following townships: Abington, Cheltenham, Douglas, Franconia, Frederick, Gwynedd, Hatfield, Horsham, Limerick, Lower Merion, Lower Providence, Lower Salford, Marlborough, Montgomery, Moreland, New Hanover, Norriton, Perkiomen, Plymouth, Pottsgrove, Springfield, Towamensing, Upper Hanover, Upper Dublin, Upper Me-

rion, Upper Providence, Upper Salford, Whitemarsh, Whitpaine, and Worcester.

There are no mountains, but there are some bold and striking hills on the north and west, and the face of the country is agreeably diversified by hill and dale. The soil is generally of good quality, particularly along the valley of the Schuylkill, and in the townships of Abington, Upper Dublin, Springfield, Whitemarsh, Plymouth, and Upper Merion, in which the limestone prevails. The ordinary timber is white and black oak, walnut, hickory, and chesnut. The state of agriculture in the greater part of the county, is equal to that in any part of the United States.

The county is drained by the various confluent of Perkiomen and Wissahickon creeks. Among its most valuable minerals is the beautiful marble of White Marsh.—Norristown is the seat of justice. Population in 1830, 1,116. This place is quite noted for mechanic industry, and literary societies.

Q. What are the boundaries, &c. of Northumberland county?

A. Northumberland county is bounded by the Mahantango river, separating it from Dauphin S., by the Susquehanna river, separating it from Union W., and part of Lycoming N. W., by another part of Lycoming N., Columbia N. E. and E., and by Schuylkill S. E. Length from S. to N. 40 miles; and the area being about 440 square miles, the mean breadth will be 11; but the width is very unequal; in one place below the east branch it is 24 miles wide, and at another about 3 miles; above the borough of Northumberland, it is confined to a width of less than 4 miles, though at a distance of 16 miles from the northern extremity. It is divided into the following townships: Augusta, Shamokin, Rush, Turbut, Chillisquaque,

Point, Little Mahanoy, Upper Mahanoy, and Lower Mahanoy.

The county lies within the great central transition formation of the state, and like every other portion of that region, is covered with mountains. The portion on the southeast side of the North branch of the Susquehanna, abounds with anthracite coal, especially the Mahanoy mountain and valley. There are beds of iron ore in Shamokin township, near which a furnace and forge are employed in the manufacture of iron. This county is well watered. There are several turnpike roads passing thro' this county. Sunbury is the seat of justice. Population in 1830, 1056.

Q. What are the boundaries, &c. of Northampton county?

A. Northampton county is bounded by Bucks county south, Lehigh southwest, Schuylkill west, Luzerne northwest, Pike north, and Delaware separating it from Warren county New Jersey east. Length diagonally from the extreme southern angle on Bucks, to the extreme northern on Luzerne, 46 miles; the greatest width westward from Delaware river to the western angle on Schuylkill and Luzerne, is very near equal to the length. It is divided into the following townships: Allen, Bethlehem, Bushkill, Chesnut Hill, East Penn, Forks, Hanover, Hamilton, Lehigh, Lausanne, Lower Nazareth, Lower Saucon, Lower Mt. Bethel, Moore, Plainfield, Pokono, Ross, Stroud, Smithfield, Towamensing, Upper Mt. Bethel, Upper Nazareth, Tobyhanna, Mauch Chunk, Williams. The surface, is highly diversified, more so than that of any part of Pennsylvania, or even of the United States. South of the Kittatinny, locally called the Blue Mountain, is a pretty extensive portion of the Kittatinny Valley. The very peculiar formation of limestone and slate, which is found in

this valley from the Delaware river to the Susquehanna, is remarkably striking here. The limestone borders on the South Mountain, the slate on the Kittatinny, meeting in the centre of the valley. In the region of the former, we find the most superior soil, in the latter the bolder feature of nature. Both are highly productive in grain, fruits, and pasturage. From many of the higher eminences of the South Mountain, the cultivated regions, in beautiful prospect, spread before the eye like a vastly extensive garden.

That portion of the county, northwest of the Kittatinny being diversified with mountainous ridges and valleys, varies in fertility. But the soil, north of the Blue Mountain, even where susceptible of cultivation, is much inferior to that which is south. Indeed, the mountain forms a line of demarkation between two climates. Vegetation is about a fortnight earlier on the south side of the mountain than on the north. This part of Northampton, however, is but little improved, and, with few exceptions, may be pronounced an almost unbroken wilderness. About one-fourth of the county is cultivated,—about one-third is susceptible of cultivation.

The county is well watered by the Delaware, Lehigh, and their tributaries. It is bounded on the east by the Delaware river, which has, for twenty-five miles, a very meandering course through a mountainous country. The Lehigh is emphatically the river of this county, having, within its limits, many of its sources, and the greater part of its course.

The mineral wealth of this county is great, especially that of iron and coal. Easton its the seat of justice; population in 1830, was 3,529. The town is supplied with water, conveyed in iron pipes from a spring about a mile from the borough.

Q. What are the boundaries, &c. of Perry county?

A. Perry county is bounded by the Kittatinny mountains, separating it from Cumberland south, by Franklin southwest, Tuscarora mountain separating it from Juniata county northwest and north, and by the Susquehanna, separating it from Dauphin east. Length 36 miles, mean width 15. It is divided into the following townships: Buffalo, Greenwood, Juniata, Liverpool, Rye, Saville, Toboyne, Tyrone, Wheatfield. This county is mountainous—the valleys are fertile. The principal streams are the Juniata, Shermans creek, Raccoon creek and a few others. Iron ore is found in various parts of the county.

There is a warm medicinal spring on the bank of Shermans creek, in a romantic and healthy situation about 11 miles north of Carlisle, twenty-two west of Harrisburg, eight from Sterret's, and four from Wagoner's gap in the north or Blue mountain, and four from Landisburg. The waters used in bathing are beneficial in cutaneous disorders, and taken inwardly, operate gently as a purgative, and powerfully as a diuretic. It rises at the foot of Quaker hill, and emits about ninety gallons the minute. Its temperature is nearly that of creek, or river water in the summer season. Mr. John Hipple has erected a commodious house here for the entertainment of visitors. This place is worthy the attention of the invalid, the naturalist and virtuoso.

Bloomfield, the seat of justice, is situated in the eastern part of the county, and has had a very rapid growth. In 1832 the number of inhabitants was three hundred and fifty; and, about nine years before, the place was a clover field without a building upon it.

Q.]What are the boundaries, &c. of Philadelphia county?

A. The following, taken from Darby's & Dwight's U-

S. Gazetteer, gives a brief, yet satisfactory, answer to this question.

PHILADELPHIA county is bounded by Delaware county S. W., Montgomery N. W., Bucks N. E., Delaware river separating it from Burlington county, N. Jersey, E., and Gloucester county, N. Jersey, S. Length from S. W. to N. E. 22 miles, mean width 7, and area 154 square miles. Extending in latitude from 39 degrees 52 minutes to 40 degrees 8 minutes, and in longitude from 1 degree 47 minutes to 2 degrees 8 minutes east from Washington City. Bounded on one side by the Delaware, and traversed by the Schuylkill, the confluence of these two streams is made in the southern part of the county. The general declivity is to the southwestward, in the direction of the mean course of the Schuylkill, and at right angles to that of the Delaware. Though comparatively confined in extent, the features of this county are very strongly contrasted. The upper and northern part is beautifully broken by hills and dales, whilst the lower and southern section is composed of recent alluvion, and is an almost dead level. The primitive ledge, on the margin of which the city of Philadelphia is built, traverses the county from S. W. to N. E., arresting the tide of Schuylkill river within the precincts of the city. On the Delaware, the scenery is rather tame, but along the Schuylkill and Wissahiccon creek becomes picturesque, and in many places even wild and bold. The variety of sites for country residences in the northern part of the county, adds no little advantage to Philadelphia; and the inexhaustable masses of gneis, affords more than an ample supply of material for the rougher, more solid, and more durable kinds of architecture. Besides the city of Philadelphia and places adjoining, the county contains the boroughs or towns of Frankford, Germantown, Manayunk, Holmesburg, Bustle-

ton, Smithfield, Richmond, Dyottville, &c. Population, including Philadelphia city and suburbs, 1820, 137,097; 1830, 188,961. (*See description of Philadelphia City.*)

Q. What are the boundaries, &c. of Pike county?

A. Pike county is bounded by Northampton S., the northern branch of the Lehigh separating it from Luzerne W., and Wallenpaupack creek separating it from Wayne N. W., Lackawaxen river separating it from Wayne N., Delaware river separating it from Sullivan county, N. York, N. E., and by Delaware river separating it from New Jersey, E., and Warren county, New Jersey, S. E. Length, crossing diagonally from east to west, 48 miles; mean breadth 15. The most prominent features of this county, are a rocky, barren soil, covered, in some parts, with valuable timber. The inhabitants depend chiefly on their forests for support. Along the borders of the Delaware, however, the aspect of things is totally different. Here, we find extensive fertile valleys, thickly populated, and highly cultivated. Milford, the seat of justice, has a high location on the banks of the river Delaware.

Q. What are the boundaries, &c. of Potter county?

A. Potter county is bounded by Lycoming S., M'Kean, W., Alleghany county of New York, N., Steuben county, New York, N. E., and Tioga county, Pa. E. Length, from south to north, 37 miles, breadth 30. The soil is universally loam, mingled, in the valleys of the rivers, with much vegetable mould. Alleghany river, Genesee, Pine creek and others rise in this county. Coal and iron are found in many places. Coudersport is the seat of justice.

The following extract of a letter published in *Hazard's Register*, gives us some idea of the early settlement of this county.

The writer says: "It was very lonesome for a number

of years. I made some little clearing, and planted some garden seeds, &c. the first spring. We brought a small stock of provisions with us. On the third of July, I started with my two yoke of oxen to go to Jersey Shore to mill, to procure flour. I crossed Pine creek 80 times going, and 80 times returning from mill; was gone 18 days, broke two axletrees to my wagon, upset twice, and one wheel came off, in crossing the creek.

“ Jersey Shore was the nearest place to procure provisions, and the road was dreadful. The few seeds that I was able to plant the first year, yielded but little produce. We, however, raised some half grown potatoes, some turnips, and some soft corn, with which we made out to live without suffering, till the next spring. At planting time, I planted all the seeds that I had left, and when I finished planting, we had nothing to eat but leeks, cow cabbage and milk. We lived on leeks and cow cabbage as long as they kept green, about six weeks—my family consisted of my wife and two children, and I was obliged to work, though faint for want of food.

“ The first winter, the snow fell very deep. The first winter month, it snowed twenty-five days out of thirty-one; and during the winter months, it snowed seventy days. I sold one yoke of oxen in the fall, the other pair I wintered on browse, but in the spring one ox died, and the other I sold to procure food for my family, and was now destitute of a team, and had nothing but my own hands to depend upon, to clear my lands and raise provisions.—We wore out all our shoes the first year, we had no way to get more, no money, nothing to sell, and but little to eat, and were in dreadful distress for the want of the necessaries of life. I was obliged to work and travel in the woods barefooted. After a while our clothes were worn out, our family increased, and the children were nearly naked. I had a broken slate that I brought from Jersey

Shore. I sold that, and bought two fawn skins, of which my wife made a petticoat for Mary; and Mary wore the petticoat till she out grew it, then Rhoda took it till she out grew it, and then it fell to Abigail, and she wore it out.

“For several years my crops were much injured by frost, and my fruit trees would not grow well; but for several years past, my crops have been seldom injured by frost, and my fruit trees grow, and bear remarkably well. My land was given to me, and I now have 16 acres cleared on this farm.

“I have now eleven in my family, have sixteen head of neat cattle, twenty-nine sheep, and have sustained some losses. I have endured some hardships here, but it is a healthy country, the water is fine, and the land, if well tilled, produces good crops. The country has hitherto settled slowly, but the population and improvements are rapidly increasing, and the prospects of the country are very encouraging.

“I raise on my small farm an abundance of all the necessities of life, and have always something to spare.—Our children often cried for bread, during the first years of our settlement here, but we have now bread enough and to spare, and all other needed temporal comforts, wherewith we are well contented, and for which, I hope, we render a daily tribute of heartfelt gratitude.

“The morals of the people here, have improved in proportion to the country. Until within a few years past, Potter county seemed to be a sink of iniquity; drunkenness and profanity, Sabbath-breaking and gambling, were the leading features of the state of society; but the scene is now greatly changed, and enterprise, industry, sobriety, peace and good order, and religion have gained the ascendancy. We now raise buildings without a drop of spirits being drunk on the occasion, without any broils

and contentions, and without an oath. We have stated preaching by different denominations at Coudersport; and the Sabbath day is generally regarded.

Q. What are the boundaries, &c. of Schuylkill county?

A. Schuylkill county is bounded southwest by Dauphin, west by Northumberland, Columbia northwest, Luzerne north, Northampton northeast, and the Kittatinny mountain separating it from Lehigh county east, and Berks S. east. Length from southwest to northeast 37 miles, mean breadth 18. It is divided into the following townships: Barry, Brunswick, Lower Mahantango, Manheim, Norwegian, Pine Grove, Rush, Schuylkill, Union, Upper Mahantango, West Penn, Wayne. The surface is generally hilly, very mountainous, and the soil, except near the streams, and some rare and favorable spots, is rough and rocky. It is drained principally by the Mahony, Mahantango and Swatara creeks, which flow into the Susequehanna river. The whole county is of transition, and abounds with anthracite coal; but no iron ore has yet been discovered of a quality sufficiently good for smelting. This is a great coal country. During the year 1834, 224,000 tons of coal were sent from the mines, which at an average price of six dollars per ton, would amount to 1,344,000 dollars.

Considering the mountainous surface and thin population of this county, the roads are very numerous. In all directions they may be seen winding through the valleys, and around the mountains, and in some places boldly ascending the steep acclivities. A turnpike from Reading passes through the county.

Orwigsburg is the seat of justice. Population in 1830, was 773.

Q. What are the boundaries, &c. of Somerset county?

A. Somerset county is bounded by Fayette W., Westmoreland N W., by Cambria N., by Bedford E., and by Alleghany county, Md. S. Length 38 miles, mean width 27. It is divided into the following townships: Addison, Alleghany, Brothers' Valley, Conemaugh, Elk Lick, Greenville, Jenner, Milford, Quemahoning, Stoney Creek, Somerset, Southampton, Shade, and Turkey Foot.

The great portion of the county lies west of the main ridge of the Alleghany, and the whole is embraced by that ridge and the little Alleghany mountain on the east, and the Laurel Hill on the west; and is therefore within the great secondary formation of the state. Besides the mountains we have named, there is a considerable elevation running in from Maryland, through nearly half the county, which is called Negro mountain, and forms a dividing ridge for the waters. Yet the county cannot be termed very hilly; part is rolling, and part level; the soil, generally of loam, is well adapted to grain, and the clayey portions peculiarly fitted for meadow grasses. Few counties in the state are better watered than this. Salt, coal, and iron ore are found in various parts of the county.

Somerset is the seat of justice. The population in 1830 was 649.

Q. What are the boundaries &c. of Susquehanna county?

A. Susquehanna county is bounded by Wayne county E., Luzerne S., Bradford W., and Broome county of New York, N. Length 35 miles, from E. to W., width 25. It is divided into the following townships: Auburn, Bridgewater, Brooklyn, Clifford, Choconut, Dundaff, Gibson, Great Bend, Harford, Herrick, Harmony, Jackson, Laws-ville, Lennox, Middleton, New Milford, Rush, Silver Lake, Springfield, and Waterford.

The surface of the county is moderately uneven; the hills are chiefly in ridges, and running parallel with the streams, are adapted to grain, and may be cultivated quite to their summits. Some elevations have the name of mountains, but their ascent is generally gradual and the soil excellent.

This county is well watered. The North Branch enters the N. E. angle of the county, and flowing round the Oquago mountain, for about sixteen miles, making the "Great Bend," returns to the state of New York, and thence, after an immense sweep through Broome and Tioga counties in New York, and Bradford in Pennsylvania, it again nearly reaches Susquehanna county at the southwest angle. As all the other streams of the county are tributary to this, they flow north, west, and south, as from the centre, to the circumference of a circle. Near Snake creek is a salt spring, from which excellent salt has been made; near the spring is a slate quarry.

Montrose is the seat of justice. The population in 1830 was 415.

Q. What are the boundaries, &c. of Tioga county?

A. Tioga county is bounded E. by Bradford, S. E. and S. by Lycoming, W. by Potter, and N. by Steuben county, New York. Length 36 miles, mean width 32.

The surface of the country is diversified. Some parts are smooth and unbroken, others are rough and mountainous. The soil is equally various; in that part of the county through which the Tioga flows, it is of a superior quality, and the county is thickly inhabited.

Tioga is well timbered. The more elevated parts, near the margins of large streams, are covered with a luxuriant growth of large pine. The inhabitants are well supplied with sugar from the sugar maple, which is very abundant in many places.

This county is rich in mineral productions. Besides salt, iron, and coal, several others have been discovered, namely, pyrites, bismuth, lead, and some gold and silver. Copperas may very easily be manufactured from the sulphuret of iron, or pyrites, merely, by throwing it into large heaps, where it is exposed to the action of the atmosphere. Bismuth, in its metallic state, is used in the manufacture of pewter, printers' types, &c. and is usefully employed to increase the hardness of lead. This article was formerly brought from Saxony, and until found in this county, was not probably known to exist in the United States.

Wellsboro' is the seat of justice. Population in 1830 not exceeding 300.

Q. What are the boundaries, &c. of Union county?

A. Union county is bounded S. and S. W. by Mifflin, N. W. by Centre, N. by Lycoming, N. E. by the west branch of the Susquehanna river, separating it from the northern part of Northumberland, and E. and S. E. by the main volume of the Susquehanna, separating it from Dauphin. The greatest length is from S. to N. 30 miles parallel to the general course of the Susquehanna river, and nearly on the meridian of Washington City; mean width 20 miles. It is divided into the following townships: Beaver, East Buffalo, West Buffalo, Chapman, Centre, Hartley, Kelly, Penn, Union, Perry, Washington, White Deer, and Mifflinsburg.

This county, which, although mountainous, is not rugged, lies in the range of the Alleghanies, and in the central transition formation. The branches of the mountains traverses it in a direction about east, north east. The chief ridges are the White Deer, Nittany, Buffalo, Jack's and Shade mountains; of which Jack's mountain is the most lofty, being considered the highest ground in the county. This county is well watered.

For some years the attention of the public have been directed to the discovery of iron ore. The external indications of this useful mineral present themselves in many places, but as yet no considerable body has been found. In Buffalo valley, in White Deer, in Hartley township, and many other places there is iron ore of a good quality, in rolled masses, and geodes on the surface of the ground. Mines have been opened, but in no instance has the quality been sufficient to encourage the miner to prosecute his labors. Of pig iron, a large body lies in the flat extending from the Sunbury ferry to the neighborhood of Selin's Grove; its quality is said to be good. It is cellular and of light brown color. Another bed of bog iron ore was discovered on Philip Herrold's farm, ten miles below Selin's Grove. This also is cellular, of a darker color, and much harder and heavier than the first mentioned. It was accidentally discovered in digging a drain connected with the canal.

Lead ore has been discovered, of a rich quality, and indications of this metal are found in the long narrows in Hartley township.

A body of iron pyrites was some years since accidentally discovered in digging a mill race on Jacob Kehr's land, on Penn's creek, about 4 miles above New Berlin; a spring issues from the rock, the water of which immediately blackens any tin or iron vessel into which it is put. Mineral coal has of a late been eagerly sought for, and lands supposed to contain it have risen greatly in price. Black slate and bituminous shale, which are considered indications of coal, have been found in places.

New Berlin is the seat of justice. Population in 1830, not exceeding 600.

Q. What are the boundaries, &c. of Venango county?

A. Venango county is bounded N. W. by Crawford, N. and N. E. by Warren, E. by Jefferson, S. E. by Clarion.

river, separating it from Armstrong, S. W. by Butler, and W. by Mercer. Length from E. to W. 40 miles, mean width 23.

The face of the country is hilly and somewhat broken, being deeply furrowed by the many streams which spread over it in every direction. Along these streams are some extensive and rich alluvial flats; the soil generally may be considered of good quality. The Alleghany river enters the county from Warren, on the line between Alleghany and Hickory townships, and meanders through it by a S. W., S. and S. E. course, and quits it on the boundary line between Scrub Grass and Richland township, having through all its windings a length of 70 miles within the county on the E., Teonista creek, Hemlock creek, Six Mile run, and on the southern boundary Toby's creek or Clarion river, which is also the recipient of a number of streams which flow from the county southwardly. On the W. the Alleghany river receives from the county, Oil creek, Sugar creek, French creek, Sandy creek, Scrub Grass creek, and some smaller streams. The Alleghany is navigable for steam-boats four or five months in the year, into Warren county, and the Pennsylvania canal, stretching to lake Erie, follows the bank of French creek from the river, 43 miles. To the mouth of this creek steam boats of 2 or 3 hundred tons have ascended.

Franklin is the seat of justice. Population in 1830, was 440.

Q. What are the boundaries, &c. of Warren county?

A. Warren county is bounded, east by McKean, southeast by Jefferson, S. by Venango, west by Crawford, N. west by Erie, north by Chataque county New York, and northeast by Cattaraugus county New York. It lies in form of a parallelogram, 32 miles from east to west, and 28 from south to north. The face of the country is greatly diversified—the surface moderately undulating yet not hilly.

Some parts of it, especially that bordering on Broken Straw creek is very stony, so that a witty *Yankee* said, when his eye was directed, not to the *Skee-eye*, but to the rocks: "*This will never probably be settled, unless by and earthquake!*" "So that when the *Skee-eye*" falls we will catch *lee-arks*." Few counties of similar extent are so well supplied with water. The principal of which is the Alleghany with its numberless tributaries. Warren is the seat of justice; finely situated on the north bank of the Alleghany. Population in 1830, not exceeding 550.

Q. What are the boundaries, &c. of Washington county?

A. Washington county is bounded N. W. by Beaver county, N. and N. E. by Alleghany, E. by Monongahela river separating it from Westmoreland and Fayette, S. by Greene county, S. W. by Ohio county Virginia, and W. by Brooke county Virginia. The longest line that can be drawn in this county is diagonally in a N. W. direction from the Ten Mile creek to the N. W. angle on Virginia 45 miles, mean breadth in a similar direction 22 miles. It is divided into the following townships: Amwell, E. Bethlehem, W. Bethlehem, Buffalo, Cross Creek, Canton, Cecil, Chartiers, Donegal, Fallowfield, E. Findlay, Hopewell, Hanover, Mount Pleasant, Morris, Nottingham, Peters. Pike Run, Robinson, Somersset, Smith, Strabane.

Lying in the great western secondary formation, the county possesses the minerals usually found in that formation, coal, iron and salt. But salt licks are not numerous, nor is there any iron made in the county. Like the greater portion of Western Pennsylvania, this county, surveyed from an elevation and from a distance, has the appearance of one vast plain; but it is in reality deeply indented by many streams, which have formed valleys of greater or lesser width and depth, and the surface has,

therefore, a rolling character, and in some places may be termed hilly.

The Monongahela river flows N. full 25 miles along the eastern border, receiving in its course Ten Mile creek, which forms the southern border of the county, Pike run, Pigeon creek and several small streams. Peter's creek, Chartier's creek and Raccoon creek are also tributaries of that river from this county, but their *embouchures* are in Alleghany county, into which they flow northerly. Herman's creek, Cross creek, Buffalo creek, Wheeling creek, Fish creek and their several branches are tributaries of the Ohio river into which they flow westward.

Washington is the seat of justice. Population in 1830, was 1,860. (*See Article Washington.*)

Q. What are the boundaries, &c. of Wayne county ?

A. Wayne county is bounded S. E. and S. by Pike county, S. W. by Luzerne, W. by Susquehanna, N. by Broome county New York, by Delaware river separating it from Delaware county New York N. E., and from Sullivan county New York E. Greatest length is along its western border, 54 miles in common with Luzerne and Susquehanna, counties, mean breadth 12. It is divided into the following townships: Buckingham, Canaan, Damascus, Dyberry, Lebanon, Mount Pleasant, Palmyra, Salem, Sterling, Preston, Scott, Manchester, Berlin.

The surface of the county is very unequal, comprising much of the variety pertaining to mountainous regions. Its principal features are a continuous upland which occupies the largest portion, indented by long narrow valleys, and a few lofty eminences, to which only the name of mountains should be applied. The general elevation of this table land is estimated at thirteen hundred feet above the level of tide water.

The highlands are much broken by the ramifications of the valleys, and the subsidence of their bases. These ine-

qualities, however, offer no insuperable obstacles to cultivation, the slopes being, commonly, gentle.

The valleys are the peculiar drains of the county; each having its proper channel into which the springs and rivulets flow. Lakes are formed in every township except Sterling. These elegant little sheets of water, clear as crystal, comprise from 50 to 300 acres, and contribute much to the beauty of the landscapes. Their outlets form some of the capital streams of the county. At first, the course of the waters is generally rapid, and this circumstance, with the favorable slope of the banks, affords innumerable situations for mills.

The county is well watered, in every sense of the word. Clay iron ore has been discovered near Belmont. Anthracite coal is found on the sources of the head waters of the Lackawanna in this county.

Bethany is the seat of justice. The population in 1830, was 327.

Q. What are the boundaries, &c. of Westmoreland county?

A. Westmoreland county is bounded by Laurel Hill, separating it from Somerset, S. E.; by Fayette S.; by the Monongahela river, separating it from Washington county, S.W.; by Youghioghany river, separating it from the extreme southern part of Alleghany county, W.; by the central part of Alleghany N. W.; by the Alleghany, separating it from the northern part of Alleghany county, N.; and by Conemaugh river, separating it from Armstrong and Indiana, N. E. The longest line is a diagonal, 50 miles from the southern angle on Laurel Hill to the northern at the mouth of Conemaugh; mean breadth, 21 miles. It is divided into the following townships: Alleghany, Derry, Donegal, E. Huntingdon, Fairfield, Franklin, Hempfield, Ligonier, Mount Pleasant, North Hunting-

don, Rostraver, South Huntingdon, Unity, and Washington.

This county is broken into hills by the streams and water courses, whose valleys have commonly a depth and breadth proportionate to the magnitude of the volumes of water which flow into them. Yet few counties in the U. States, in proportion to surface, have more good land.—Fruits, grasses,—vegetables of every kind, suitable to the climate, grow abundantly. The county is well watered. Iron ore and salt abound.

Greensburg is the seat of justice. Population in 1830, was 801.

Q. What are the boundaries, &c. of York county?

A. York, one of the southern counties, is bounded by Adams county W., Cumberland N. W., Susquehanna river, separating it from Dauphin E., and Lancaster N. E. and E., by Harford county in Maryland S., and Frederick county, Md. S. W. York county bounds on Maryland 42 miles, but the longest part is a line parallel to the general course of the Susquehanna river, 48 miles; mean width, 18. It is divided into the following townships: Codorus, Carroll, Conewago, Dover, East Manchester, Fairview, Fawn, Franklin, Hallam, Heidleberg, Hopewell, Lower Chauceford, Manheim, Monaghan, Newberry, Paradise, Peach Bottom, Shrewsbury, Upper Chauceford, Washington, Warrington, West Manchester, Windsor, York, and Spring Garden.

The county is divided between the three geological formations. The primitive occupies nearly the eastern half of the county; the secondary the central portion, and contains a strip of limestone about five miles in width, in which is marble of an excellent quality. The transition, or old red sand stone formation, claims the remainder. The chain of hills known as the Conewago

hil cross the S.E. angle, and the South mountain bounds the county on the N. W. In Windsor township, on the Susquehanna, there is abundance of iron ore, well adapted for casting, and, though formerly not prized for forging, has latterly been successfully used for that purpose.—Slate of excellent quality for roofing, is found in Peach Bottom township, and bituminous coal has been discovered within two miles of the borough of York, but from late examinations, the quantity is supposed to be inconsiderable.

The county is finely watered, the noble Susquehanna flowing along its greatest length; the several branches and smaller streams discharging themselves into the Great Codorus, the Conewago, and the Yellow Breeches, which, together with Muddy Creek, Fishing Creek, Beaver Creek, Creutz Creek, Cabbin Branch, Canadochly and Otter creeks, with others, flow eastwardly into the river. The Codorus is a very fine stream, running through the town of York, and has lately been rendered navigable by artificial means, through the enterprize and liberality of the citizens of that borough. The Yellow Breeches flows along the N. W. boundary of the county. A canal of about one mile in length has been cut around the Conewago falls, by which the descending trade of the river may avoid the dangers of that rapid.

York is the seat of justice. Population in 1830 was 4,216.

During the session of Congress in the town of York, in 1777, Philip Livingston, a member of that body, died here, and was buried in the cemetery of the German Reformed church. A monument has been erected to his memory, consisting of a pyramid of white marble, surmounted by an urn.

NOTE.—This county was formerly noted, for having

serious and bloody contentions about their boundaries.— It is about a century since the first settlements were commenced by emigrants from Germany and the north of Ireland. Previous to the year 1728, unauthorized settlers seated themselves on lands in this county, but at the close of the year, they were removed at the request of the Indians. In the year 1731, Cressap, and others, under a pretence of a title from Maryland, located themselves on the same lands, from which the former intruders had been driven off. The consequence of these unlawful proceedings, was long, angry, and bloody contentions, until, finally, by the interference of the king and council, Cressap was captured, and the contention terminated.

Q. Which are the principal Cities and Towns in Pennsylvania?

A. Philadelphia, Lancaster, and Pittsburg, which are cities, and the following towns, Westchester, Reading, Harrisburg, Carlisle, Chambersburg, York, Easton, and Washington.

Q. Can you give a brief description of these?

A. I can.

Philadelphia City, the largest city in Pennsylvania, and the second in size in the United States, is situated in the county of the same name, between the Delaware and Schuylkill rivers, about five miles above the junction of the two streams, 120 miles from the Atlantic by the course of the Delaware, and 55 miles from it in a straight line to the S. E. The state house in Chesnut street between Fifth and Sixth streets, stands in latitude 39 degrees, 56 minutes, and 51 seconds; longitude 75 degrees, 10 minutes and 5 seconds W. of Greenwich, and 1 degree, 46 minutes, and 30 seconds E. of the city of Washington. The city lies 30 miles below the head of steam navigation on the Delaware, 96 from Harrisburg, 89 from

New York, 98 from Baltimore, and 120 statute miles, or by the post route 136 miles, from Washington city. In its natural state, the ground on which Philadelphia stands, was an undulating alluvial plain. The Indian name, Coaquahanock, was changed to that of Philadelphia, and the city regularly laid out into streets crossing each other at right angles, extending by a small angle from the true meridians. This regularity does not extend however to either of the suburbs or liberties. In the latter, the streets in part correspond to those in the city, in part they are at right angles to each other, but oblique to those of the city; and in part they are irregular, crossing at acute and obtuse angles. Dock street is the only one, either in the city or Liberties, which extends in curved lines. Happily the undulating surface on which the body of the city is built, has been left untouched by the rage for levelling, and contributes also to clear the streets of filth whenever rain falls on them; an advantage relinquished in places where a different policy has prevailed. Philadelphia, like New York, stands on a superstratum of porous alluvion, based on primitive rock, which is an additional cause of cleanliness and dryness. The environs of Philadelphia on the Delaware, have been justly admired for the richness, and along the banks of the Schuylkill, for the variety of their scenery.

Without due attention to the cause, it may excite some surprise that the scenery of the Delaware should present features so much more monotonous than that of the Schuylkill; but the geological structure of the country explains the difference. The primitive rock ledge, on the margin of which Philadelphia is situated, is at that city, only touched by the Delaware; whilst on the contrary, it is there that the Schuylkill emerges from the regions of hills based on the primitive, and meets the tide. If the two rivers are compared as to their relative connexion with

the primitive ledge, the Delaware forms the traverse at Trenton, similar to that of the Schuylkill river at Philadelphia.

The city was founded in 1682, by William Penn: its original form was a parallelogram, extending from the Delaware to the Schuylkill, and more than a mile on these rivers. Its present limits are much enlarged, and embrace in the northern and southern suburbs, an important part of its population. It is accessible by the Delaware for vessels of six hundred tons burthen; and the Schuylkill is navigable for vessels of lighter draught above its junction with the Delaware; the navigation in the winter season, is much obstructed by ice.

That part of the city adjacent to the Delaware was formerly the principal seat of business; but since the coal mines in the interior of the state have been opened, their immense importance, with the facilities for the transaction of business afforded by the completion of railroads and canals, terminating in that vicinity, have directed the attention of the public to the Schuylkill, and business is rapidly increasing on its banks. The numerous stores and other buildings erected in this part of the city, are the best evidence of the growing importance of this branch of domestic enterprise.

The city itself, as was before remarked, is laid out with regularity; the streets crossing each other at right angles. There are nearly 600 of these, generally paved with good walks of brick; some of them are broad, and are fine promenades. There are also several public squares, which contribute in a great degree to the beauty and comfort of the city; one of them contains 10 acres of land. Public sewers have been constructed under most of the principal streets, which carry the filth of the city to the Delaware, and promote, in a high degree, the health and comfort of the inhabitants. The city is built with a de-

gree of neatness and beauty which is scarcely surpassed in the United States. The houses are generally of brick, and are ornamented with steps and window sills, and not unfrequently a basement, of white marble. Among the most prominent of the public buildings are the U. S. bank, a magnificent white marble edifice, copied after the Partheon at Athens; it is 161 by 87 feet, including porticoes: the bank of Pennsylvania, also, of white marble, modelled after the temple of Minerva, 125 by 51 feet; the mint of the United States, a splendid building faced with marble, and presenting a front of 122 feet, embracing a portico 62 feet long, and two wings of 30 feet each; it is of the Ionic order, and was taken from a splendid Grecian temple on the river Ilissus, near Athens.

Besides these are the Girard bank, the Philadelphia library, the hall of the Philosophical society, the university of Pennsylvania, the arcade, the state house, from which the declaration of American independence was first promulgated; the academy of fine arts, the hospital, masonic hall, alms' house, arsenal, exchange, orphans' asylum, carpenters' hall, custom house, old and new penitentiary, marine asylum, the institution for the deaf and dumb, the medical college, three prisons, three theatres, and ten markets, one of which is a mile long.

In 1830, there were 90 churches in the city and suburbs. Of these 20 were Presbyterians, 10 Methodists, 9 Episcopal, 7 Friends, 6 Baptists, 5 Lutherans, 4 Roman Catholics, 10 African, and 19 of other denominations. There are four bridges across the Schuylkill: Permanent bridge, thrown across from the west end of Market street, is 1300 feet long, and cost \$235,000. The Fairmount bridge consists of a single arch of 350 feet span; it was erected in 1823, and cost \$150,000 dollars. These are beautiful and substantial structures. There are also the Upper or Railroad bridge, built upon a plan similar to the Fairmount

bridge, and upon which the Columbia railroad crosses the Schuylkill; and the Lower or Floating bridge, at Gray's Ferry. The latter is the oldest bridge.

In addition to the bank of the United States, with a capital of \$35,000,000, there are 16 other banks in the city incorporated by the State, with an aggregate capital of 20,600,000 dollars; of which \$18,935,000 has been paid in.—The capital of the different insurance companies, amounts to \$5,180,000.

Philadelphia is noted for the benevolent disposition of its citizens, and for the number, variety and extent of its charitable and literary institutions. Among these may be mentioned the Pennsylvania hospital, founded in 1750, the buildings of which occupy an entire square; the university, Girard college, the medical college, the almshouse, the dispensaries, Friends' asylum for the insane, humane society, orphan's, and indigent widows', and single women's asylum, the institution for the deaf and dumb, and the abolition, savings' fund, and fuel saving societies, besides many others. Some of these are worthy of further notice.

The institution for the deaf and dumb was established in 1820, and incorporated the next year, with a grant of 8,000 dollars from the state, and a liberal appropriation for the support of indigent pupils from Pennsylvania. The building is of granite, was erected in 1824, is 96 feet in front by 63 in depth, and is a chaste and beautiful specimen of architecture. The annual expenses of the institution are about 11,000 dollars. The number of pupils in May, 1833, was 72; half of whom were males and half females. The university of Pennsylvania, located in this city, in January 1833 had 186 students in the academical department, and in the medical department 368 students. The alms-house is supported at an expense to the public of about \$50,000 per annum. The city is well supplied

with public schools and academies, some of which are well endowed; and it has recently received a most munificent bequest, for the establishment of a college for orphans, by the will of the late Stephen Girard. This gentleman, who died in 1831, by his will bequeathed the sum of two millions of dollars to the corporation of the city, in trust for the endowment of an Orphan College. The site selected by Mr. Girard for this object, is one and a fourth mile from the city, on the Ridge Road, and at a place called Peel Hill. It contains forty five acres of land, upon which, by the terms of the will, buildings are to be erected for the accommodation of 300 pupils, together with those necessary for the teachers, and for other purposes. Provision is made for the education of as many poor orphans as the place will accommodate; the pupils are to be selected, 1st from the city of Philadelphia, 2nd from the state of Pennsylvania, 3d from the city of New York, and 4th from the city of New Orleans. They are to be taught the various branches of a sound education, including practical mathematics, philosophy and the modern languages; and provision is made for extending the course of study, for those who may merit it by distinguished capacity or industry. The corner stone of the Girard College for Orphans was laid, on the 4th July 1833. The building is to be 160 front by 217 feet in flank, including the porticoes. The order is Corinthian; the superstructure will repose on a basement in the form of a truncated pyramid, composed of 12 steps surrounding the whole building. The columns are to be six feet in diameter at the base, and 54 feet six inches high. The body of the building will be of blue marble, and the columns, pediment, &c. of white marble.

The magnificent water works of Philadelphia, by means of which the city is supplied from the Schuylkill with pure and wholesome water, are without a parallel on this side of the Atlantic. The water is raised from the river and

conveyed into reservoirs, elevated 56 feet above the highest ground in the city. From these reservoirs 3,000,000 gallons of water are taken daily for the supply of the city. 72 1-2 miles of iron pipe have already been laid, to convey the water, and additions are constantly making. The total amount expended for this object is 1,443,583 dollars, and the receipts for the present year are estimated at 77,500 dollars. From this source the fire companies are liberally supplied with water in case of fire; of these, there are about 30 engine, and 18 hose companies. The United State mint was established by Congress in 1790, and has since been continued at Philadelphia. The whole amount coined at this establishment from 1793 to 1831 was 37,000,000 dollars. In 1831 there was coined 3,932,47360 dollars of which 518,000 dollars was from the gold of the United States gold. Philadelphia is deservedly celebrated for the value and variety of its manufactures. All the necessaries and most of the luxuries of life are manufactured in the city and its vicinity, and large quantities of useful and fancy articles are annually sent abroad. The internal trade of the city is very great, particularly with the Western States. In 1830, 573,876 barrels of flour were inspected. The commerce of Philadelphia is also extensive; the tonnage, including registered, enrolled and licenced, in 1833 amounted to 79,703, of which 44,029 was registered; 28,093 enrolled; 1,615 licenced; and 5,963 foreign. The tonnage of new vessels built and registered, from January 1st to July 1st 1833, was 88,068, is to be employed in the foreign trade. The number of arrivals in 1830 was 3,702, of which 415 were foreign, coastwise, 3,287; in 1831, 3,602 of which 396 foreign and 3,206 coastwise. The imports of the state chiefly centre here. In the year ending September 1830, they amounted to \$8,702,122, and during the same time the exports were, of domestic produce 2,924,452, foreign 1,367,341 dollars. There are several exten-

sive ship yards for building merchant vessels, and the U. S. have also a navy yard here. A line of steam packets is contemplated to run between this city and Charleston. The population of the city for several periods, has been as follows:—in 1731, 12,000, 1753, 18,000, 1790, 42,500, 1800, 70,287. 1810, 96,664, and in 1820, 119,325. In 1830, the population of the city and suburbs was as follows:—

Suburbs N.,	Northern Liberties,	-	31,376	
	Spring Garden,	- - -	11,141	
	Penn Township,	- -	1,507	
	Kensington	- - - -	13,326	
			<hr/>	58,350
Suburbs, South,	Southwark, East,	-	10,361	
	Southwark, West,	-	19,379	
	Moyamensing,	- -	6,822	
	Passyunk,	- - -	1,441	
			<hr/>	29,003
	City	- - - - -	-	89,458
			<hr/>	
	Total,			166,811

Though it may seem to be a digression from the general arrangement of *this* work, to notice other than county towns, the writer cannot omit introducing to notice *Dyottville*.

DYOTTVILLE is a flourishing village on the banks of the Delaware, between Kensington and Richmond, in the extreme northern suburbs of Philadelphia, and covers a space, including the farm, of between three and four hundred acres. Its locality is remarkable both for beauty and health. There are no less than five glass factories here; and the place affords employment for five hundred persons.

The limits of this work does not allow us to notice all the advantages of this place, afforded to the laboring

classes employed. Mr. DYOTT certainly merits the praise of a philanthropist for the noble *system* he has there introduced. For a full detail, we would refer the reader to a pamphlet of 94 pp. 8vo., published at Philadelphia, in 1833, giving "*An Exposition of the System of Moral and Mental Labor established at the Glass Factory of Dyottville, in the county of Philadelphia.*"

Lancaster City, the seat of justice of Lancaster Co. 62 miles W. from Philadelphia and 35 S. E. from the borough of Harrisburg. Longitude from Washington City 40 minutes E., latitude 40 degrees 3 minutes N. This is the largest inland town of Pennsylvania and has long been distinguished for its thrift and wealth. It is situated in the heart of a rich, populous and well cultivated country, of whose trade it is the chief depot. For the convenience of intercourse between this city and Philadelphia the first turnpike road of the state was commenced in 1792, and finished in 1794. The commercial prospects of the city of Lancaster have been highly improved by the slack water navigation lately made on the Conestoga creek, which connects the city with the Susquehanna river and the Chesapeake bay, and the state rail-road from Columbia to Philadelphia which passes through it. The streets of the city, which intersect each other at right angles, are chiefly paved and curbed. The ancient buildings are principally one story high, in the old German mode but the modern dwellings are lofty, substantially and commodiously built, and some of them equal in convenience and beauty to any in the state. This city was for many years the seat of government of the commonwealth, which was removed thence to Harrisburg in 1812. The population is chiefly German and the decendants of Germans, and amounted in 1830 to 7703; the taxables to 1720. The public buildings consist of a brick court house, at the in-

tersection of King and Queen streets, the two principal streets; jail, and many places of public worship. The dwellings may amount to 1200.

The town plot contains a square of two miles, comprehending 2500 acres, which is indented by the Conestoga creek upon the east. It was originally laid out in 1728, by James Hamilton, Esq. of Philadelphia. There was then on its site a single log house. Few lots were sold in fee, the chief part being let on ground rent, on terms so easy as to invite many poor settlers, which caused the town at an early period to become too large for the surrounding country. It was incorporated as a borough by governor George Thomas, by charter dated first May, 1742. In 1754 it contained 500 houses, and above 2000 inhabitants, and was then noted for its manufacture of saddles and guns. But it was said that at that period there was not a single good house in it. The first German Lutheran church, and school house, were built in 1734. The borough charter was confirmed by act of assembly of 20th March, 1818, by the style of the "mayor, aldermen and citizens of Lancaster." It was a select and common council, a recorder and aldermen, who with the mayor (elected by the councils) form the mayor's court. Lancaster is noted in the provincial history of Pennsylvania as having been the scene of an inhuman massacre of unoffending Indians, by some inhabitants of Paxton and Don egal townships. These had been rendered furious by the Indian butcheries on the borders, and in the blindness of their rage did not discriminate between the peaceable Indian and the warring savage. On the 14th December 1764, 30 men, well mounted and armed, surrounded the wigwams of a remnant of a tribe of the Six Nations, on the Conestoga manor, and barbarously murdered some women and children, and a few old men, and amongst the latter the chief, Shaheas, who had ever been distinguished

by his friendship for the whites. The majority of the villagers, who were abroad at the time of the attack, were placed for protection in the prison at Lancaster. But on the 27th of the same month, a party of 50 men, with faces blackened, from the same townships, suddenly entered the town, galloped to the workhouse, which having forced, they surrounded with a guard, and murdered, uninterruptedly, the Indians there, 14 in number. Having effected their purpose they retired undiscovered, nor could the efforts of the government, though strenuously exerted, bring the murderers to justice.

Franklin college was established here by act of assembly, 1787, for the instruction of youth in the German, English, Latin, Greek, and other learned languages; in theology, and in the useful arts, science and literature; and was designed particularly for the improvement of the German population. By the incorporating act 10,000 acres of land within the boundaries of the present counties of Lycoming, Tioga, Bradford and Venango, were granted to the trustees; and by an act of 1788 some lots in the city of Lancaster were vested in them, and soon after the incorporation a sum of money was raised for its use by private subscription. It continued in operation about two years, when the trustees were unable to proceed. Since that time occasionally a Greek and Latin, and sometimes only an English grammar school, has been kept in the buildings belonging to the institution. The Lancaster county academy was incorporated by act of assembly 14th April, 1827, and the sum of 3000 dollars was granted to the institution.

The city contains 2 Lutheran, 1 German Reformed, 1 Episcopalian, 1 Catholic, 1 United Brethren, 1 Presbyterian, 1 Methodist, 1 African, 1 Quaker, and 1 Independent Methodist churches; many private schools, 3 libraries, a reading room, museum, several religious and charitable

societies, 9 presses, 5 publishing English, and 4 German papers, four tan yards, six breweries, and two potteries.

By the slack water navigation lately made on Conestoga creek, the city of Lancaster has attained the dignity of a port, and produce is embarked there for Philadelphia by the way of the Susquehanna river, and the Chesapeake and Delaware canal.

Pittsburg City, Alleghany Co. is situated in 40 degrees 32 minutes N. latitude, 3 degrees 2 seconds W. longitude from Washington City, at the confluence of the Alleghany and Monongahela rivers; 201 miles N. W. from Washington City, 300 miles W. of Philadelphia, 196 from Harrisburg, 120 S. of Lake Erie, 1100 by land and 2000 by water above New Orleans. The Monongahela here runs a due N. course, and receives the Alleghany from the E., or perhaps it might be said with more propriety, that the Alleghany receives the Monongahela, the former being the greater stream. The city stands on a level alluvial bottom of small extent; for immediately back of it, and at a distance of not more than half a mile from the point rises Grant's hill, high and almost precipitous, and is the great secondary bank, which spreads itself so as to leave along the Alleghany river, a strip of land of one third or one fourth of a mile wide, of great fertility, and along the Monongahela, a still narrower belt. The hill was named after the unfortunate major Grant, who was defeated here by the French and Indians, in 1758. This spot claims notice politically and commercially from the year 1753, when the French erected a fort here, to which they gave the name of Du Quesne from the marquis of that name, the governor general of Canada. Its value as a military position had been marked in the preceding year by Gen. Washington, when on a mission from Gov. Dinwiddie of Virginia to ascertain the views of the French in this quarter. The fort was captured by

the British in 1758, and received the name of Fort Pitt, in honor of the Earl of Chatham.

The city was founded in 1764, but was not regularly surveyed until 1784. On the 22d April of that year, Tench Francis, Esq., who was the attorney of the proprietaries, one of whose manors included the site, instructed Geo. Potts, Esq., to lay out the town, and to divide the rest of the manor into proper lots and farms, and to set a value thereon, that they might be offered for immediate sale. The survey was completed in May or June following, and confirmed by the attorney on the 30th September, 1784. For some years it increased slowly; containing in 1786, about one hundred houses, erected chiefly on the third bank, but of late years it has extended rapidly along the margin of the rivers, and is encroaching upon Grant's Hill, houses being built on its sides and summit. It was erected into a borough by an act of assembly, passed March 5, 1804, and was incorporated as a city, by an act passed March 18, 1816.

It is not possible to do justice to this article, without embracing in our views the neighboring towns and hamlets, which form the suburbs of the city. On the W. side of the Monongahela, and about a mile above Pittsburgh, lies the flourishing borough of Birmingham; and immediately opposite to the city, under the high and jutting hill, called coal hill, is a street of manufacturing establishments, which may be considered as an extension of Birmingham, and which is connected with Pittsburg by a fine roofed bridge, built in 1818, 1500 feet in length, and 37 in width, having 8 arches supported by stone piers, by a joint stock company, to which the state subscribed \$40,000, at an expense of \$102,450. In the opposite direction, and north of the Alleghany river, is the borough of Alleghany town, on a beautiful plain of great extent, also connected with Pittsburg, by a roofed bridge,

erected in 1810; in length 1122 feet, breadth 38 feet, and 38 feet above the water, resting on 6 piers of dressed stone, by a joint stock company, to which the state also subscribed \$40,000, at the cost of \$95,249. Above Alleghany town, about a mile, and on the same side of the river, is the town of Manchester. The Northern Liberties of Pittsburg, and Bayardstown, are on the city side of the river, and are closer suburbs.

In 1810, the population of the city of Pittsburg was about 5,000; in 1820, 7,248; and the census of 1830, gives to the city proper, 12,542; to Pitt township, in which it lies, 3924; to the borough of Alleghany town, 2801; and to the borough of Birmingham, 520; Bayardstown borough, 2125.

During part of the period between 1817 and 1824, this city suffered much from the general stagnation of business, and extensive bankruptcy which prevailed. But since the latter year its prosperity has been wonderful, and bids fair to continue.

The commercial importance of Pittsburg is very great, and the additional facilities of transportation which modern improvements have created, seems to assure an enormous and indefinite increase of business here. By the canal on the Alleghany and Conemaugh rivers, it penetrates central Pennsylvania W. of the Appalachian system; and by the railroad across the mountains, and the canal of the Juniata, it reaches to the Susquehanna and the richest counties of the state E. of the mountains, and thence to the sea board. By the Mongahela river, and by the Ohio and Potomac canal, it is connected with the southern part of the state, and with Maryland and Virginia, and the seat of the Federal government. By the Ohio river, it carries on active trade with the western states and New Orleans; and by the proposed canals, N. and N. W., it may attain a large share of the business of

New York, of the state of Ohio, and the N. W. country generally.

There are three banks established in Pittsburg: the Merchants' and Mechanics' Bank, with a circulating capital of \$599,550; Bank of Pittsburg, capital \$875,000; and the Exchange Bank, with a capital of \$1,000,000. The Pittsburg Savings institution has a capital of \$21,000 paid in.

The manufactures of this city have already given it much celebrity, both abroad and at home. They first excited attention about the year 1810, and have since, though occasionally depressed by the changes in the general business of the country, continued to grow into their present importance. The vast quantities of coal in the surrounding hills, and the great supplies of iron obtained from the region W. of, and particularly along the mountains, rendered now more accessible by the state canals and the admirable position of the city for commercial enterprise, have made it a vast assemblage of manufacturing establishments, which day and night roll up immense volumes of smoke, darkening the very heavens, and discoloring every object, the houses and their inhabitants. Here are many and extensive forges, rolling and and slitting mills, and foundries, supplied with the bars and blooms of Centre, Mifflin, and Huntingdon counties, in the very centre of the state, and from the counties more west. Here are cast ploughs, mill machinery, stoves, cannon, and cannon balls; here is constructed a vast number of steamboats with their engines, and employment is given to several thousand artizans in iron and wood, connected with this great manufacture. Here are six or eight extensive glass manufactories, whose products have been admired in every part of the Union, but particularly in the towns S. and W. and N. of Pittsburg. Here are many and extensive cotton and woollen manufactories,

paper mills, saw and grist mills, distilleries, &c., &c., all set in motion by steam, raised at the cheapest rate by coal, which costs little more than the price of digging and and a short cartage. Between 5 and 6000 wagons arrive here annually from the east, loaded with merchandize for the west; whilst the quantity of flour, whiskey, lumber, salt, &c., &c., &c., which is brought by the road, the canals, for exportation by the Ohio, is immense. It is calculated that thirty millions of feet of plank descend the Alleghany alone from the pine forests on the sources of that river. The products of the manufactories of Pittsburg certainly exceed the annual value of \$2,000,000.

Within the last two or three years, steamboats have been constructed to ply upon the Alleghany and Monongahela rivers, and during the season of the year when the waters are full, a regular communication we believe, is maintained with the towns on the former river, as high as Warren. The state canal, which follows the right bank of the Alleghany river, from the mouth of the Kiskiminitas, crosses the river by an aquaduct at Alleghany town, and up a tunnel through Grant's hill, and communicates by an outlet lock, with the Monongahela river.

Turnpike roads from north, south, east, and west, communicate between the city and the adjacent country. The town is supplied with water by means of steam engines, and the fluid is distributed from an elevated reservoir, through the streets by iron pipes. The councils have authorized a company to light the streets, &c. by gas.

The Pittsburg academy was established in 1787, and 5000 acres of land were granted by the state in aid of the institution. It continued to prosper until 1819, when more extensive means of education being required, the legislature incorporated, by act of 18th February, 1819, the "Western University of Pennsylvania," to be located at or near Alleghany town, and authorized the trustees of

the academy to convey to the university all their estate, real and personal, and at the same time granted to the latter 40 acres of vacant lands belonging to the commonwealth, bounded by, or adjoining the outlots of Alleghany town. But some difficulty as to title has prevented this grant from being wholly operative. Since that period, in 1826, the legislature has given to the university, from the state treasury, 9600 dollars. By aid of these donations, and the liberality of individuals, the trustees have been enabled to erect on Grant's hill, on the Monongahela side of the town, suitable buildings for the institution. The university is under the direction of the Rev. Dr. Bruce, as president. It has four academical instructors, and about 60 students.

The city and its vicinity are well provided with schools, and there is a noted boarding school for young ladies a few miles from Pittsburg, on Braddock's fatal field.

There are several political, commercial, and religious papers published in Pittsburg. But a taste for literature is not much diffused, nor very active.

Religious Institutions. There are in Pittsburg proper, exclusive of the suburbs, 1 Baptist, 2 Presbyterian, 2 Methodist, 1 Episcopal, and 2 Roman Catholic churches, including the large cathedral on Grant's hill; 1 Covenanters, one Seceder's, 1 German Reformed, 1 Unitarian, 1 Associate Reformed, 1 Lutheran, and 1 African, beside 2 Protestant churches lately erected; making in all 16 places of public worship. The cathedral, according to the proposed design, when completely finished, will be an ornament, not only to the city, but to the United States.

The "Western Theological Seminary," established by Presbyterians, is located at Alleghany town. The edifice for the institution is beautifully situated on an insulated knoll, about 100 feet above the level of the river. The main building is about four stories high, and the wings

three. It is in length one hundred feet, and contains one hundred rooms, destined each for a single student.— There are also commodious rooms for a library, which, by donation from Scotland and from individuals in this country, is already respectable. There were about 35 students here in 1833.

Bible, missionary, and tract societies are duly established, and the institution of a temperance society has had very beneficial effects.

A mineral spring has lately been discovered on the farm of John S. Scully, Esq., in St. Clair township, four miles S. W. of the city, to which the name of the Pittsburg mineral spring has been given. It issues from the fissure of a rock, on the side of a small hill, and discharges about a gallon of water per minute, which is conveyed through a tunnel into a reservoir, from which it is pumped to supply the bath house. The water in the spring, when undisturbed for a few hours, is covered with a thin white pellicle, which after some time, assumes an iridescent appearance. It then falls to the bottom, and is renewed if the water is not disturbed, as may be more particularly observed every morning.

When the water is first taken from the spring, its appearance is perfectly clear, its taste is lively and rather pungent, with a peculiar ferruginous flavor, and an odor which has some resemblance to the scourings of a gun barrel, and which is easily recognized as arising from an impregnation of sulphuretted hydrogen gas. If the water be suffered to remain some hours in a glass, it loses in some degree, its transparency, as well as its lively and pungent taste; numerous air bubbles are extracted from it, and a light deposit takes place on the inside of the glass. Vessels which are constantly used, become lined with an ochry incrustation, which is with difficulty removed, and the bottom and sides of the well, as well as

the substance over which the water flows, have a sediment of the same nature. The temperature of the spring is nearly the same at all seasons of the year. In August, when the temperature was at 85 in the air, that of the water was only 54. Its specific gravity, when compared with distilled water, is as 1002 to 1000. Dr. Mead reports, after due examination, this water to contain muriate of soda, muriate of magnesia, 1-2; oxide of iron, 1; and sulphate of lime 1-2; carbonic acid gas in 1 quart, 18 cubic inches: and he recommends it for all purposes in which chalybeates are generally given.

A bed of marble, of the species called bird's eye, has been discovered about six miles from the city, and one and a half from the canal; it cuts smoothly, takes a fine polish, and is well adapted for ornamental purposes.

The corporate powers of the city are vested in a select council of 9 members, three of whom are elected annually, and serve 3 years; a common council of 15 members elected yearly; a recorder, and 12 aldermen, appointed by the Governor, and holding their offices during good behaviour; a mayor elected annually by the select and common councils, from among the aldermen, and a mayor's court composed of the mayor, recorder, and aldermen, or any four of them.

The coal around the city lies in strata of from 6 inches to 10 or more feet in depth, and is found in the hills which overlook the town, at the height of 300 ft. above the bed of the river.

West Chester, post town, and seat of justice of Chester county, is situated on the dividing ridge between the waters of Chester creek and the Brandywine, 2 miles E. of the latter stream, five miles S. of the Great Limestone Valley, and Lancaster and Philadelphia turnpike road, and 23 from Philadelphia, 115 N. from Washington city, and

75 S. E. from Harrisburg. The Strasburg road passes through it westward, intersected by one from the Great Valley to Wilmington. The place was formerly called the Turk's Head, from the sign of the only tavern here.—The town owes its existence to the removal of the seat of justice to the site, from *Old Chester*, by virtue of an act passed 22d March, 1784, obtained principally by the exertions of Col. Hannum, an active member of the assembly of that period, who dwelt here. It was erected into a borough in the year 1799, whose boundaries embrace an area of one mile and a quarter square, taken wholly from the township of Goshen, having the township of East Bradford for its western limit. In the year 1800, the inhabitants amounted to 374; in 1810, to 471; in 1820, to 552; in 1830, to 1252; and in December, 1831, the population was 1500; voters, about 250. The original plan of the town consisted of four contiguous squares, with two principal streets crossing in the centre. In 1829, several streets were opened, and new squares formed on the S. W. side of the primitive squares, by Wm. Everhart, Esq. There are 250 dwelling houses within the borough limits, of which 220 are in the village, and the residue on the adjacent farms.

The public buildings in the borough are, the court house and prison, finished in 1786; the county offices, built in 1791; market houses, *old* one, built in 1802, *new* one, 100 feet long, built in 1831; an academy, built and incorporated in 1812; Roman Catholic chapel, built in 1793; Methodist Episcopal church, built in 1816; 2 Quaker meeting houses, one built in 1812, the other in 1830.

The institutions of a public character are, the post office, established in 1802; bank of Chester county, with a capital paid of \$90,000, chartered in 1814: library founded in 1814; cabinet of natural science, founded in 1826, incorporated 1831; atheneum, founded and incorporated in

1827 ; female boarding school, established in 1830 ; six day schools of various grades and dates ; 2 fire companies, one established in the year 1800, the other in 1818.

The literary institutions of this town are highly creditable to its inhabitants, and form exemplars for other county towns of the state, which, we are pleased to see, have been in part copied by Norristown and Doylestown.

The side walks of the streets of were first paved with bricks in the 1823. The two principal streets were macadamized in the years 1829 and 1830.

The improvements in the borough and surrounding country, have been such, that the enterprising citizens of the county have constructed a railway from the town to intersect the state railroad between Philadelphia and Columbia at the Warren.

The zealous and enlightened editor of the Village Record exclaimed :

What is to prevent the town from growing to four times its present size ? In a high and healthy situation, surrounded by the richest and best cultivated land—an extensive market for cattle—the county town of one of the most wealthy and populous counties in the state—provisions plenty and cheap,—why should it not become a place for manufacturing—especially for all those manufactures that do not require water power to drive them ?—Besides, from the liberal and praiseworthy enterprize of Wm. Everhart, Esq., town lots, beautifully and eligibly situated, may now be obtained on moderate terms.—Where, then, can capitalists invest their money more advantageously than by purchasing lots and building here ?”

Reading, post and county town of Berks county, situated on the E. bank of the river Schuylkill, one mile below Tulpenhocken creek, 54 miles N. W. of Philadel-

phia, about the same distance E. of Harrisburg, and 143 N. E. from Washington city. Population in 1820, 4278; 1830, 5631. The town was laid out in 1748, by Thomas and Richard Penn, proprietaries and governors in chief of the province, and private owners of the ground plot.—The plan adopted was that of Lancaster, with some improvements suggested by experience. The streets are spacious, running in straight lines, and intersecting each other at right angles. There are five streets running E. and W., and nine running N. and S. The court house stands upon a square in the centre, 200 by 220 feet. There are two semi-annual fairs, beginning the 4th of June and 27th of October, and lasting two days; held under a grant by deed of the proprietaries, July 30, 1766. They are continued to this time under the German appellation of “Jahr-Markts,” *yearly markets*, though at present they are only resorted to by the country youth of either sex for the purpose of hilarity. The two weekly market days, Wednesday and Saturday, though recognized and re-established by the act of assembly of 1813, have their origin in a grant contained in the deed of the proprietaries above mentioned. The town was erected into a borough by act of assembly, passed in 1783; altered and repealed by an act of 1813, under which it elects a legislative town council, and burgesses whose duty is to carry the ordinances into effect. Reading contains between seven and eight hundred houses, including a court house, public offices, and jail, and two market houses. The town is well provided with houses of public entertainment, most of them spacious and comfortable, and one upon an elegant and extensive scale. The river which is here about six hundred feet wide, is crossed by two substantial covered bridges, of frame work, supported on stone piers and abutments, erected at the county expense. The

Schuylkill canal extending from Philadelphia to Pottsville, passes through the town. The Union canal, connecting the waters of the Schuylkill with the invaluable internal improvements of the state, mingles with that river at Reading, where a dam across the river forms a fine sheet of water, and a convenient harbor for boats.

Seated in the heart of a fertile limestone country, on a great turnpike road leading from Philadelphia to the western countries, and enjoying the advantages of two extensive and important canals, both in successful operation, Reading bids fair to become one of the most important inland towns in the state. Its present condition is prosperous, and flourishing in a high degree, all its tenements being occupied, and a large annual addition of houses having been found necessary to accommodate its increasing population. It is surrounded by streams affording an abundance of water power, and has long enjoyed an extensive trade in flour and grain.

Here are two banks and twenty large stores, besides many smaller ones, all which appear to be doing profitable business.

The place is celebrated for its manufactures of wool hats, by which a large portion of its industrious inhabitants are maintained, and many considerable fortunes are realized. It is supposed that from twenty to thirty thousand dozens of hats are made here annually, which go to supply the southern and western markets to a great extent.

There are two daily mails between Philadelphia and Reading, and several daily lines of stages pass through it from Philadelphia to Harrisburg or Pottsville.

Several individuals in and about Reading have applied themselves successfully to the cultivation of foreign grapes, and the town is furnished with that agreeable fruit in

moderate quantities, from vineyards within its own limits, or in its vicinity.

Wine has also been made to a considerable amount, and a species of rough claret, known by the name of "Reading red," is not without its admirers in the good town.

No town in the Union, perhaps, surpasses Reading in salubrity and beauty of situation. Standing upon a plateau formed by the depression of magnificent hills towards the river, the town plot is sufficiently level for the purposes of convenience, and elevated enough to prevent the stagnation of water on its surface, forming a medium between too hilly and too flat. The hills around afford a rich variety of prospects for the lovers of the picturesque. The Blue mountains on the north, at the distance of 17 miles, are distinctly visible, and corresponding hills on the E. and W. form a beautiful amphitheatre, of which the parterre exhibits a succession of well cultivated farms, blooming in luxuriant vegetation.

On the rise of the mountain, behind the borough, is Hampden spring, a copious source of pure water, which has been conducted into the town in iron pipes, at a comparatively small expense, and distributes an abundant supply amongst the inhabitants by means of ordinary hydrants.

The population of Reading, as well as that of the county, consists principally of Germans, well known for habits of economy and persevering industry. The English language, however, is generally spoken, and is taught in nearly all the schools, amounting to about twenty in number.

There is besides an academy in which the Greek and Latin languages are taught, together with mathematics and general literature, a large and handsome edifice, erected with funds granted by the legislature, and endowed

with several thousand acres of unseated lands derived from the same source.

Harrisburg, post town, borough, seat of justice of Dauphin Co., and capital of the state, is situated on the E. bank of the Susquehanna river 97 miles from Philadelphia and 35 from Lancaster, 110 from Washington City, 200 from Pittsburg; latitude 40 degrees 16 seconds N.; longitude 0 degrees 5 seconds 30 minutes E. from Washington City. The eastern part of the site of the town is a gently swelling hill or high bank between the river and Paxton creek; and along the vale of the latter runs the state canal. The lower part lies on the level plain above the mouth of the creek. The town has 5 streets parallel with each other and with the river, and six others which intersect these at right angles. In the centre of the town there is a large hollow square cut by crossing streets, and surrounded by buildings; in the centre of this stands the two market houses. The town, including M'Claysburg, which, though not in the borough bounds, is separated from it by an alley only, has 636 buildings, comprehending dwellings and work shops, of which 201 are of brick 431 frame and 4 of stone. The public buildings erected by the town and county, are a large court house, (with offices attached) built of brick, two stories high, surmounted by a cupola and bell. This house was for many years occupied by the state legislature; a stone jail, having in the rear a spacious yard enclosed by a high stone wall. A large county school house, of brick, two stories high with a cupola, in which the pupils are taught after the Lancasterian method. This was erected by virtue of an act of assembly, by which provision was made for the gratuitous education of the poor. The whole number of pupils in this institution in 1829, was 278, of whom 94 were pay students; the remainder were educated at the public

expense, at the cost of \$6-84 for each student. Of churches, there are 10, viz. 1 Lutheran, 1 Presbyterian, 1 German Reformed, 1 Episcopalian, 1 Roman Catholic 1 Methodist, 1 Unitarian, 1 Baptist, 1 Church of God, and 1 African. Several of these are neat structures.

There is also a masonic lodge, a large and handsome building. There are 11 printing offices, 9 of which issue journals, one of these, namely: The Pennsylvania Telagraph, is published daily; and five of which are published semi-weekly, during the session of the legislature, and weekly during the recess, viz. The Pennsylvania Reporter, The Pennsylvania Intelligencer, Harrisburg Chronicle, Antimasonic State Democrat, and The Key Stone: the remaining 3 weekly, viz. The Gospel Publisher, Der Vartenlands-Wächter, and Die Morganrøthe.

The town contains 2 banks, 1 a branch of the bank of Pennsylvania and the other the "Harrisburg bank," chartered 9th May, 1814, and also the Harrisburg Savings Institution.

The commercial prospects of this borough are very flattering. By means of the state canal and rail road it may participate large in the trade of the great tract of country drained by the Susquehanna river and its tributaries.

Over the Susquehanna, in front of the town, is erected a fine wooden bridge, roofed, and supported by stone piers, in two parts, separated by an island; completed in 1817, by the architect Mr. Burr, under the direction of an incorporated company. Its length is 2876 feet, width 40 feet, elevation 50 feet; cost \$155,000, of which the state subscribed \$90,000. There is also an elegant rail-road bridge now building opposite mulbury street.

The capitol, or state house, is a magnificent structure, standing on the highest part of the town. From its cupola may be seen one of the finest landscapes of the state,

embracing a wide extent of cultivated country, swelling hills, the meanders of the river, and the adjacent mountains.

The building fronts the river to the west, which is seen through State street, a handsome avenue 60 feet wide. The pile consists of the main building, or state house, and two wings for the public offices, designed to be connected together by low ornamented walls, with gateways. The centre building is set back of the wings, so far that the inner columns of the porticos of the parts are in range; thus affording an uninterrupted view through them all. The ground slopes in front, and the main entrance is from State street, by plain and massive gates and a flight of steps. There is another entrance by a similar gateway on the south. The lot is surrounded by a low brick wall surmounted by wooded palisades.

The main building is 180 feet front, 80 feet deep, 2 stories high. The lower story contains the vestibule and stair case, the chambers of the senate and house of representatives, and several small apartments for the accommodation of the members of assembly and its officers. The 2d story is appropriated for an *executive chamber*, where the governor transacts business and receives visitors, committee rooms, 4 in number, of large dimensions, and two rooms appropriated to the state library, now consisting of about 6000 volumes.

The main entrance is by a circular portico, the whole height of the building, sustained by 6 Ionic columns of red sand stone, painted white, 4 feet in diameter, and 36 feet high; the portico receding 37 feet to a circular wall. The floor of the portico on which the columns rest, is 4 feet 6 inches high from the ground, and is attained by 5 steps of sand stone, and paved with massive flags of the same material. From the floor to the top of the cornice the distance is 46 ft., and the whole height of the front 50 ft. 6

inches. From the top of the cornice to the top of the dome is 57 feet 6 inches making the whole height 108 feet.

The front on either side of the portico is divided into 3 equal parts, one of which is given to the corner, projecting with one window, which lights the transcribers' apartment at one end, and a retiring room of the senate chamber at the other. The remaining parts contain 3 windows, which give light to the senate and representative chambers. Under the porticos are 4 windows on the first floor, 2 of which communicate with the senate and representative chambers respectively, and the others with small apartments appropriated to the sergeants at arms. The ends are divided into 4 equal parts; one is given to each corner, projecting with one window, the remaining two contain 3 windows, the central one of which is Venetian. The divisions and lights of the second story correspond with those of the first. The rotundo above the roof is composed of 16 columns, 22 inches in diameter and 17 feet high, and is 48 feet in diameter outside of the columns. There is a space of 3 feet between the columns and wall. The diameter of the inside is thirty-four feet. The dome is 40 feet in diameter. It contains 8 windows, 3 feet 6 inches wide and 9 feet 6 inches high, and 8 niches of like dimensions. Four of the latter are partly covered with the faces of the cloak, and the remainder are designed for the reception of statues.

From the great portico we advance to the vestibule by large folding doors in the external wall. The vestibule is elliptical, having on its longest axis 40 feet and on its shorter 34 feet. There are 8 doors opening into it in each story, 2 of which in the first communicate with the senate and representative chambers respectively, and a 3d, more properly an arch way, leads to a double flight of stairs which, mounting half the height of the story, unite and

conduct to the second floor. On this floor the staircase again divides and ascends into the roof and rotundo. The vestibule is partly floored over, leaving a circular opening surrounded with a railing, through which from below may be seen the openings of the several landings, the vaulted ceiling, and through that the interior of the rotundo, with its fluted roof.

The senate chamber, on the left of the entrance, is 75 ft. by 57 in the clear, and 21 ft. high. The hall of the representatives has the same length and height, and 68 in breadth. The senate chamber is arranged for the accommodation of 36 members, to each of whom is allotted a space of 3 feet 6 inches.

Their desks are 2 feet wide and the platforms or benches on which they rest slightly raised one above another, are 5 feet 9 inches wide. There is a space of 5 feet between the members' seats and gallery. The latter will contain several hundred persons.

The chair of the speaker, centrally placed in the length of the room, is supported on an ornamented *dais*, with a columnar and neatly carved back. Behind the chair is an open space lighted by the Venetian window, from which doors leads to closets on either hand, used as offices by the clerk. There, are also the retiring rooms for the members.

The hall of representatives is disposed after the same manner; but being designed for the accommodation of 108 members the retiring rooms are wanting. Each member has a space of 2 feet 9 inches, a desk one foot 9 inches resting on a platform four feet six inches.

The wings, much smaller in every way than the main building, are however in keeping with it, and have porticos of similar form, and when connected by the wall yet to be built, will have a fine effect in the plan. At present they have an isolated appearance.

The whole pile is simple and plain in its exterior and in its internal distribution, but having a bold and distinct contour it is grand and imposing.

Harrisburg was founded in 1785. by Mr. John Harris, who inherited the ground on which it stands from his father; we are indebted chiefly to a memoir of Mr. Samuel Breek, for the following interesting anecdote of the elder Mr. Harris. He was a Yorkshire man born in humble life, who emigrated to America soon after the first arrival of William Penn, bringing with him the whole of his property, 16 guineas. His first employment here was in clearing away the wood, and in grubbing the streets of Philadelphia. "Being an enterprising man, he soon became an active pioneer, and with the fruits of his industry commencing a trade with the Indians, penetrated by degrees to the westward, until he reached the susquehanna, on the left bank of which river he built himself a cabin, and sat down permanently at the very spot where the town of Harrisburg now stands. His first purchase of land was a tract of 500 acres, bought of Edward Shipen for 190 pounds. The deed, bears date the 19th December, 1733. He opened a profitable commerce with his red neighbors, who were numerous about the Paxton creek, and had several villages in the vicinity, along the Susquehanna shore."

"It happened one day that a number of his Indian customers, who had been drinking freely, called for an additional supply of rum. On Mr. Harris' refusing to gratify them, they dragged him from his hut, and bound him to a mulberry tree at the foot of which he now lies buried. They declared their intention of burning him alive, and bade him prepare for instant death. Dry wood was gathered, and fire was held in readiness to kindle it. The yells of the exasperated savages echoed along the shore, while with demoniac gestures they danced around their

victim. In vain he supplicated for mercy, and offered every thing in exchange for life. The fire was brought to the pile, and about being applied, when a band of friendly Indians burst from the forest and set him free. His liberators were conducted by his negro slave Hercules, who on the first demonstration of violence, had fled to a neighbouring Indian village for succour.

“Mr. Harris gratefully emancipated the slave to whose presence of mind and active zeal he was indebted for his life; and the descendants of Hercules inhabit the town, now built around the spot where he so nobly acquired his freedom.

Mr. Harris, in order to perpetuate the remembrance of this deliverance among his descendants, directed that after his death his body should be deposited at the foot of the mulberry tree.

The trunk of that tree is still standing, which flourished in full vigor when Wm. Penn first landed on the shores of the Delaware.”

Harrisburg was incorporated by an act of assembly passed the first day of February, 1808, under the style of the Chief Burgess, Assistant Burgess, and Town Council of the Borough of Harrisburg, with the usual corporate powers.

The population of the *borough*, by the census of 1830, exclusive of M'Claysburg, was 4307. M'Claysburg, in 1830, had 219 inhabitants, making the population of the *town* 4526.

A plan has recently been proposed for using the water of the Susquehanna river, (by means of a race or aqueduct, commencing at McAlisters, six miles above the town, for supplying the borough with water for domestic and hydraulic purposes. A power, it is supposed, may be thus gained sufficient to drive thirty pair of five feet stones.

Several stages for the E. and W. parts of the state, one S. to Baltimore and Washington, and also several northward, leave Harrisburg daily.

Carlisle, post town, borough, and seat of justice of Cumberland county, on the post road leading from Philadelphia to Pittsburg, 118 miles from the former, and 117 from the latter, and about 16 miles W. of Harrisburg and the Susquehanna river, in the centre of a rich and well watered limestone valley, and standing on rising ground, presents a rich and variegated landscape, of mountains, woods, and cultivated farms. It was founded in 1751, by the proprietaries, who purchased several farms for that purpose. In 1753 it contained five log houses, but being a border town and military post, it thrived rapidly. It now contains near 650 houses, and 3708 inhabitants.

The principal streets cross each other at right angles, and are neatly paved. A large open space was left in the centre, which is in part occupied by two stone churches, a market house, a commodious court house, and fire proof offices. The railroad passes through this square.

Beside these, the public buildings in the town are six churches, pertaining to the English Presbyterians, Episcopalians, Lutherans, German Reformed, Methodists, Scotch Presbyterians, and Roman Catholics.

Dickinson college, built of limestone, is situated on an elevated spot in the west part of the town, erected on the site of an elegant brick edifice, which was burned in 1803. The present building is 150 feet in length, four stories high, surmounted by a beautiful dome, from which there is an extensive view of the valley, and the mountain by which it is bounded, and particularly of the North mountain, for about 80 miles of its range. An additional college edifice is now building.

This college received its name in memory of the great and important services rendered to his country by John Dickinson, and in commemoration of his liberal donation to the institution. It was established and incorporated by the legislature in 1783, but the funds then requisite were supplied by private munificence. But in 1786 the state gave it the sum of \$500, and 10,000 acres of land, and in 1791, \$1500, and in 1795 the further sum of \$5000. The building for the accommodation of students having been destroyed by fire, in 1803 the legislature authorized the treasurer of Cumberland county to pay the trustees of the college \$6000, from the arrearages of state taxes from the county, by way of loan; and by an act of 1806 this loan was increased to \$10,000. The amount received under these two acts, was but \$8,400, and in 1819 the debt was remitted by the state. In 1821 a further donation was made by the legislature of \$6000, in consideration of a reconveyance to the state of the 10,000 acres of land previously granted, which had proved a burden rather than a relief to the institution, and a further sum of \$2000 annually for five years, was also granted. After struggling for years with difficulties, the result of deficiency in the active funds of the institution, the trustees were compelled to suspend its operations in the year 1816; in which prostrate condition it continued until revived by the aid afforded in 1821. Since that period, it has been extensively useful. By the act of 1795 it was stipulated that there should be admitted into the college any number of students, not exceeding 10, who may be offered, to be taught reading, writing, and arithmetic, *gratis*. In 1828, the college had 6 academical instructors, 22 graduates, and 109 under graduates, and assisted six indigent students. The expenses of a student here for one year, with the exception of his books, candles and

clothing, are estimated at \$176. At present the number of students is 208, including the grammar school and college proper.

A little to the E. of the town there are extensive barracks and other buildings, erected in the revolutionary war for the accommodation of troops, and preservation of public stores. The town was incorporated by act of assembly of April 13, 1782, by the name of the burgesses and inhabitants of the borough of Carlisle, with two chief burgesses, five assistants, high constable and town clerk. Fairs are authorized to be holden here on the fourth Thursday of May and October, annually.

There are some springs and a limestone cave near Carlisle which merit attention. The sulphur springs, about four miles N. of the town, on a branch of the Conedogunit creek, were formerly much frequented, and there is here a large building for the accommodation of visitors. In the centre of a large field, a mile and a half also N. of the town, is the "Hogshead Spring," in a conical excavation, nearly 60 feet in circumference, having a limestone wall on one side, and a gentle and regular descent upon the other. Six or eight feet below the summit is an arched opening, through which is a passage declining at an angle of 40 degrees, and 10 feet deep, wide enough to admit a man stooping. At the bottom of this cavity is a pool of delicious water: apparently stagnant, yet sweet, cool, and refreshing; qualities which it always preserves, but there are no visible means by which the basin receives or discharges it. Letart's spring, about 2 miles S. of the borough, is remarkable for sending forth a volume of water sufficient, at the source, to turn two mills; the stream passes near Carlisle on its way to the Conedogunit, and drives several other mills in its course.

York, post town, borough, and seat of justice of York county, lies on the Codorus creek, partly in Spring Garden and partly in West Manchester townships, about 83 miles W. from Philadelphia, 21 from Lancaster, 11 from Columbia, and about 25 S. of Harrisburg. Lat. 39 deg. 57 minutes N.; long. from Washington city, 0 degrees 17 minutes W.

It is built on a plain, with streets at right angles with each other, and contains about 700 dwellings and many stores and taverns. The public buildings consist of a court house and county offices, of brick. The court house was occupied by Congress when driven from Philadelphia during the revolutionary war. It is now too small for the business of the county.

An academy, also of brick, to which the state has given \$2,000—a county prison of stone—a poor house a short distance from the town.

There are 9 churches in the town, viz: Lutheran, German Reformed, Moravian, Episcopal, Roman Catholic, Presbyterian, Methodist, Quaker, and African Methodist; all substantial brick buildings except the last, which is of frame. A Bible Society, Sunday School Union, and a female charitable association called "Dorcas."

In the cemetery of the German Reformed church is the grave and a monument erected to the memory of Philip Livingston, a member of Congress, who died during the session of that body in York, in 1777. The monument consists of a pyramidal shaft of white marble, surmounted with an urn.

A slackwater navigation has lately been made along the Codorus creek, from the borough to the Susquehanna, a distance of 11 miles, of which 8 consists of artificial pools, and 3 of canals, with 9 locks, said to be executed in a very superior manner.

This is a rich and thriving town, as is apparent by its

increase of population. It contained in 1820, 3,545 inhabitants; and in 1830, 4,216 and 843 taxables.

The town is supplied by a company incorporated in 1806, with wholesome spring water.

Chambersburg, post town, borough and seat of justice of Franklin county is one of the most flourishing inland towns in the state. It is pleasantly situated at the confluence of the Falling Spring and Conococheague creeks. 143 miles W. of Philadelphia, 77 N. W. of Baltimore, 90 N. W. of Washington City and 48 S. W. of Harrisburg. The site of its location was selected a century since, for its advantages of water power and soil, by Col. Benjamin Chambers, for his residence and settlement, in a wilderness, through which, at that time, roamed the red men and the animals of the forest.

He erected a dwelling and the first mills in the county and surrounded them by a fort, which sheltered from the incursions of the savages, his family and others who were induced to settle in his neighborhood.

The town of Chamberburg was laid out in 1764; but increased little until after the peace of 1783, and the erection of Franklin county in 1784, since which, it was continued steadily to improve. It forms a township which has the name of Franklin. It contains at present about 500 dwellings, generally of brick or stone, substantially and many of them tastefully, built.

The population in 1830 was 2794. Its public buildings are a brick court-house, and county offices, prison, 8 churches, an academy of brick, 3 stories high, capable of accommodating many students, to which the state has given \$1000; a neat banking house, for the accommodation of the "Chambersburg Bank," which is successfully conducted, with a capital of \$247,228; and a masonic hall, a handsome structure.

It contains many stores, mechanics, and manufacturing establishments, and houses of public entertainment.

There are 4 weekly newspapers published here, 3 in the English and one in the German language.

The inhabitants are industrious, moral and religious, and not deficient in enterprize.

The water power now gives motion to 2 flour mills, having each 3 pairs of stone; 2 fulling mills, a paper mill, a cotton and woollen manufactory, an oil mill, several carding machines and a manufactory of edge tools, carried on to a very great extent, and making articles of superior quality, at a price lower than similar ones can be imported; and in 1831 a large paper mill, for the fabrication of straw paper, was erected.

The water power in, and within five miles of, the borough, is adequate to propel an hundred pairs of stones, furnishes facilities for manufacturing purposes, not surpassed in any part of the state; surrounded by a healthy, fertile, and highly cultivated country.

It has the advantage of a turnpike road by the way of Harrisburg to Philadelphia, and another by the way of York, and like roads to Baltimore and Pittsburg. A rail road from Harrisburg to Chambersburg is now under contract. A part of the road will be completed this fall; the remainder next summer. The length of the line is nearly 56 miles, and the estimate of cost \$7,673-33 per mile.

Another road is contemplated through Gettysburg to York; but it is doubtful whether the advantages which can be derived from the road will justify the expense of its construction.

Easton, a post-town, and borough, is the seat of justice, of Northampton co., and the largest town in the county; distant, 190 miles N. E. from Washington City

and 101 from Harrisburg, 56 N. from Philadelphia, and 73 S. W. from New-York.

It is situated at the confluence of the rivers Delaware and Lehigh, and extends from the mouth of the latter, along the former, nearly a half mile to the Bushkill creek, so that the town is bounded on three sides by water. It is built on ground which ascends in an angle of 5 degrees above the horizon, extending directly west from the Delaware.

It contains five streets, running east and west, and 3 N. and south, which have paved walks upon their sides.

In the centre of the town is a public square, surrounding the court-house. The other public buildings are, five churches, Presbyterian, Episcopalian, German Reformed, & 2 Luthern, and an academy, in which the languages are taught. By act of assembly 9th March, 1826, a college was established, under the title of "La Fayette college." This institution we are told, is now in a prosperous condition.

The buildings are chiefly of stone or brick, and two stories high. The number of dwellings are about 600, besides shops and other out houses, one third of which are of brick.

Easton was incorporated into a borough on the 23d of September 1789, and now forms a township. There is an elegant bridge, of wood, of three arches, covered, 600 feet long and 24 feet wide, over the Delaware, which cost \$80,000.

Across the Lehigh, a chain bridge, suspended on four chains, hanging in two loops and two half loops, having two pass ways for teams, and a foot-walk between, guarded by hand railing. Its length is 423 feet, width 25 feet. There are also two other bridges over the Bushkill.

There are two daily lines of stages which run between this town and Philadelphia, and also stages from it to ev-

ery part the country. There are here 5 fire engines, 3 hose carriages with 2300 feet hose.

The country adjacent to the town is bold, broken, and romantic. The soil is highly productive, and being well cultivated, gives a most pleasing aspect to the vicinity of Easton.

Farm houses, orchards, fields and meadows, are commingled along the bottoms of the river and the slopes of the hills. Bushkill creek, one of the finest mill streams of the United States, passes the Chesnut ridge within the borough, and by a winding and precipitous course affords many valuable mill seats.

A library, was formed in 1811, containing about 3000 volumes, and an interesting cabinet of minerals. There are two banks, one a branch of that of Pennsylvania, the other, the Easton Bank, erected under the act of assembly of 1814, with a capital of \$400,000.

The trade of the town is very considerable, particularly in the article of flour, which constitutes the principal staple of the county. Population in 1810, was 1657; in 1820, was 2370; in 1830 was 3529; taxables in 1828, 660. The town is supplied with water, conveyed in iron pipes from a spring about a mile from the borough.

Q. What are the internal improvements of Pennsylvania?

A. Pennsylvania is distinguished for internal improvements, for her superior roads and bridges, &c. &c. To Pennsylvania must be awarded the praise of having constructed the first *stone turnpike* in the *Union*. More than two thousand miles of turnpike have already been constructed in Pennsylvania. The turnpike road from Lancaster to Philadelphia, 62 miles long, was commenced in the year 1792, and finished in 1794, at the expense of \$465,000, by a private company, So early as 1762 it was

proposed to connect the waters of Lake Erie and the Ohio with those of the Delaware, by the improvement of the rivers, convenient portages, and intermediate canals. In prosecution of this great conception, Dr. Rittenhouse and others surveyed and levelled a route for a canal between the waters of the Susquehanna and Schuylkill rivers, by means of the Swatara and Tulpehocken Creeks. But a company was not incorporated for making such a canal until 29th September, 1791.

The roads, particularly such as lead through a populous country, are constructed of stone, others of earth, all made upon plans which would not now be approved, but which nevertheless enable the traveller drawn in a coach by 4 horses to travel from Philadelphia to Pittsburg, a distance of 303 miles, in 60 hours, and on shorter journies at the rate of from 6 to 7 miles the hour. The law prohibits any angle on these roads greater than 5 degrees, and few roads have steeper ascents than 3 3-4 degrees.

Q. Are there many bridges in Pennsylvania?

A. The great number of bridges, which Pennsylvania contains, has given it the name of the *State of Bridges*. Between sixty and seventy companies have been authorized to build bridges, and 50 have been completed at a cost of \$1,750,000. But, in many of the counties, the inhabitants have constructed bridges at their own expense. These bridges are usually of stone, costing from 10 to 40 and even \$60,000 each.

On beholding these stone bridges, we are, at once, struck with the beauty and simplicity of their structure, while they seem to partake of the firmness of the everlasting hills.

For the structure of its wooden bridges, Pennsylvania merits the highest commendation. In number, size, and grandeur of design they are scarcely equalled. In some

parts of Europe, they are held up as specimens of brigid architecture, worthy of imitation.

Q. Can you give an account of the Canals and Railroads in Pennsylvania?

A. The following extracts from authentic documents, give a summary view of the Canals and Railroads.

STATE CANALS AND RAILROADS.

These Canals and Railroads were undertaken at the expense of the State, and continue under the control of the Legislature as public property. The construction and management of them are entrusted to three commissioners, appointed annually by the Governor.

	Length.
Delaware division, - - -	60
Columbia East division, - -	10
Juniata Branch do - - -	89
Western Branch do - - -	105
French Creek Feeder, - -	19
Harrisburg line, }	63
Susquehanna division, }	
North Branch do - - -	55
West Branch do - - -	25
Total, - - - - - - -	<hr/> 426

The main trunk of this system of canals commences at Columbia, at the termination of the Philadelphia and Columbia Railroad, and extends thence westward 172 1-2 miles, till it meets the Alleghany Portage railroad at Hollidaysburg. It recommences at the western extremity of the railroad, and continues westward 105 miles to the Monongahela river at Pittsburg.

The following *Canals*, undertaken by the State, are now in active progress:

Frankstown line of the Juniata division, exsending from Huntingdon to Hollidaysburg, is 30 1-2 miles in length including about 15 3-4 miles of slackwater navigation.

Beaver division commences on the Ohio river at the mouth of Big Beaver, and extends to Newcastle. Length 24 3-4 miles, of which about two-thirds are slack water and towing path.

Franklin line commences on Alleghany river, at the mouth of French Creek, and extends up the latter stream till it meets the French Creek feeder. Length 22 1-4 miles, seventeen of which are slack-water and towing-path.

Lycoming line commences at Muncy dam, and extends up the W. Branch of the Susquehanna, and terminates at Big Island, opposite to the mouth of the Bald Eagle.—Length 41 1-4 miles, of which about 10 miles are slack-water.

Wyoming line of the North Branch division commences at the Nanticoke dam, and extends up the North Branch, terminates near the mouth of Lackawannock creek.—Length 16 miles.

Columbia and Philadelphia Railroad commences in the city of Philadelphia, at the intersection of Vine and Broad streets, and terminates at Columbia. Length 81 miles and 6-10ths. It is a handsome double track throughout. Estimated cost of the whole work, 2,297,120 dollars and 21 cents. Average cost per mile, estimated at 28,173 dollars and 63 cents.

Alleghany Portage Railroad. This railroad commences at Hollidaysburg, at the termination of the Frankstown line of the Juniata division of the main trunk of the canal, and extends to Johnstown, where it meets the western division of the canal. Length about 37 miles. The sum-

mit of the mountain, where the railroad crosses it, is about 1,398.71 feet above the basin of the canal on the eastern and 1,171.58 feet above that on the western side. The railroad is graded 25 feet wide with two sets of tracks. —On each side of the mountain there are five inclined planes, and two stationary engines. The greatest inclination of these planes makes an angle of about 6 degrees with the horizon. The cost of this road with two tracks and the necessary machinery, is \$1,271,718.

CANALS CONSTRUCTED BY PRIVATE COMPANIES.

Schuylkill Canal and Navigation Company, incorporated in 1815. The work was commenced in 1816, and the canal has now been in operation several years. Length 110 miles; breadth at the surface, 36 feet, at the bottom, 24; depth, 4 feet. Lockage, 620 feet. It extends from Philadelphia to Reading, and thence to Mount Carbon.—It comprises 31 dams, commencing at Fair Mount water works, near Philadelphia, by which is produced a slack-water navigation of 45 miles; 125 locks, 80 feet by 17 wide, of which 28 are guard locks; 17 arched aqueducts, a tunnel of 450 feet in length, cut through and under solid rock, and 65 toll and gate houses. The dams are from 3 to 27 feet in height. Cost, to January 1, 1830, 2,336,380 dollars.

Union Canal.—This canal was constructed in 1827. It extends from Middletown on the Susquehanna river, to the head of the Girard canal, two miles below Reading, connecting the waters of the Susquehanna with those of the Schuylkill.

Length, eighty miles, exclusive of the Swatara feeder which extend twenty-four miles. Its works comprehend a tunnel, 243 yards in length, eighteen feet wide, and fourteen high; two summit reservoirs, containing twelve million cubic feet of water, the one covering twenty-se-

ven, the other eight acres; two steam engines, each of 100 horse power, and three water wheels for feeding the canal by pumping; two dams, forty-three waste wiers, forty-nine culverts, one hundred and thirty-five bridges, twelve small and two large aqueducts, two guard locks of wood, ninety-two cut-stone locks, and fourteen miles of protection wall of stone. Width at the surface of the water, thirty-six feet, at bottom, twenty-four; depth, four feet. Dimensions of locks, 75 by 8 1-2 feet. There is also connected with this canal a railroad of about four miles in length, extending from the capacious basin at Pine Grove, to the coal mines. Cost of the canal and railroad, exclusive of interest on loans, about two millions of dollars.

Lackawaxen Canal.—This canal commences at the termination of the Delaware and Hudson Canal, near Carpenter's Point, and unites with a railroad at Honesdale. Length, thirty-six miles; width at the surface, thirty-two feet; at bottom, twenty feet; depth, four feet; In 1825, the Lackawaxen Company was authorized to act with the Delaware and Hudson Canal Company. Including seventeen miles of Lackawaxen river, these two canals, united, form a navigation of 117 miles. Cost, \$16,000 per mile.

Lehigh Canal.—Company incorporated in 1818. This canal extends from Easton, on the Delaware river, to Stoddartsville, connecting Morris Canal with the Mauch Chunk railroad. Length, including nine and three-quarter miles of slack-water pools, forty-six miles and three-fourths. Breadth, at the surface of the water, from sixty to sixty-five feet; at bottom, forty-five feet; depth, five feet. It has forty-three locks, of which two are guardlocks, beside five guardlocks at the several pools. Locks, 100 feet by 22. Lockage, 360 feet. There are, also, eight

dams, varying in height from six to sixteen; four aqueducts, and twenty-two culverts. Cost, \$1,558,000.

Conestoga Navigation.—Company incorporated in 1825. It extends from Safe Harbor on the Susquehanna river, at the mouth of Conestoga creek, to Lancaster. Length, eighteen miles. The navigation is effected by a series of locks and dams. Locks, 100 feet by 22. Cost, \$4,000 per mile.

Conewago Canal, passing a fall of the same name on the Susquehanna river, is 1 1-2 miles in length. Lockage, 21 feet.

RAILROADS.

The *Mauch Chunk* railroad was commenced in January 1827, and completed in May following. It extends from the coal mines, near Mauch Chunk, down an inclined plane to Lehigh river. The elevation of the mines above the river, at the point where the coal is received in boats, is 936 feet. The railroad has a continued descent from the summit, so that the cars descend by their own gravity, and are drawn back by mules. Its length, from the mines to the river is nine miles, and that of its branches at the ends and sides four and a half. The coal is transported in cars, fourteen of which are connected together, containing a ton and a half each. A single conductor rides on one of the cars, and regulates their movement. From three hundred to three hundred and forty tons of coal are discharged daily at the river. Single track. Cost, \$3,050 per mile.

Mount Carbon Railroad.—Company incorporated in the spring of 1829, and the road commenced in October following. It commences at Mount Carbon, and extends to Morrisville, and thence through Pottsville to the Forks. Two and three tracks. Cost, one hundred thousand dollars.

Schuylkill Valley Railroad commences at Port Carbon, and terminates at Tuscarora. Length, 10 miles. It has fifteen lateral railroads intersecting it, the united lengths of which amount to about thirteen miles. The main road has two tracks; the lateral roads but one. Cost of the main stem, \$5,500 per mile; that of the lateral roads, \$2,600 per mile.

The *Schuylkill Railroad*, thirteen miles in length, consists of a double track; cost, seven thousand dollars per mile.

Mill Creek Railroad commences at Port Carbon, and extends up Mill Creek four miles. Single track. Cost, fourteen thousand dollars. About three miles of lateral railroad intersect the main stem, which cost about two thousand dollars per mile.

The *West Branch Railroad* commences at Schuylkill Haven, at the foot of Broad mountain. Length, including the West Branch, fifteen miles. Double track on the main stem. Cost, 150,000 dollars. There are, in addition, lateral branches of a single track, five miles long, intersecting it, which cost per mile \$2,000.

Pine Grove Railroad extends from the mines to Swatara feeder, five miles. Cost, 30,000 dollars. (See *Union Canal*.)

The *Little Schuylkill Railroad* commences at Port Clinton, and extends up the stream to the mines at Tamaqua, about 23 miles. Completed in 1831.

The *Lackawaxen Railroad* commences at the termination of the Lackawaxen and Delaware and Hudson Canal, connecting that canal with the coal bed at Carbondale. Length, sixteen miles, an elevation of 800 feet being overcome by five inclined planes, each from 2,000 to 3,000 feet in length. Single track. Cost, 6,500 dollars per mile.

The *Central Railroad* extends from Danville to Sunbury, near the junction of the Susquenanna with its West Branch. A branch railroad is to be constructed to Danville.

The *Westchester Railroad* leads from the borough of West Chester to Paoli, where it joins the Philadelphia and Columbia railroad. Completed in 1832. Estimated cost, including cars and all other charges, ninety thousand dollars.

Philadelphia and Trenton Railroad, constructed in 1833, 26 3-4 miles long. This railroad extends from Philadelphia to Trenton, N. J. on the Delaware, via Bristol, and Morrisville opposite Trenton. This will prove a great accommodation, particularly in seasons when the waters of the Delaware are low.

Harrisburg and Chambersburg Railroad. From Harrisburg, via Carlisle, to Chambersburg, 48 miles, 145 miles W. by S. from Philadelphia.

The *Philadelphia, Germantown, and Norristown Railroad* is about nineteen miles in length, extending from Philadelphia to Norristown on the Schuylkill. Completed in 1832, as far as Germantown. A railroad is also projected from Norristown to the Lenigh river, at Allentown.

The *Philadelphia and Delaware County Railroad* is to extend from Philadelphia, southwesterly, along the western margin of the Delaware river. Leave has been obtained from the legislature of Delaware, to continue it through that state to the Maryland line, towards Baltimore.

Sixty-seven other railroads have been projected in this state, and companies for constructing several of them have been incorporated.

Q. What is the state of agriculture in Pennsylvania?

A. The best in the Union. Especially east of the

mountains, in the neighborhood of Philadelphia, in Lancaster county and part of Cumberland—the contry is under excellent cultivation and great attention is paid to agricultural pursuits. The farms are generally of from 85 to 250 acres, and very skillfully managed, especially among the Germans. Wheat, rye and maize are the most important products. Barly, oats and buckwheat are also considerably raised. The farmers of this state send the best flour in the Union to Philadelphia and Baltimore. Pennsylvania also produces abundance of excellent fruit, as apples, peaches, pears, plumbs, grapes, &c. &c. which are raised in quantities and great perfection. The aurated melon of every discription is raised here; and the produce is so plenty that they are some time sold for two cents a piece. Hemp and flax are also raised. The hop is also cultivated here. Culinary vegetables, potatoes, turnips, cabbage, &s. &c. &c.

Q. What is the state of commerce and manufactures?

A. It is not practicable to obtain a correct knowledge of the commerce or Manufactures of the state, we have therefore adopted the treasury report of 1830, not having had any other at hand. This however will give us a pretty correct idea of the commerce and manufactrues of Pennsylvania.

The tonnage which entered the ports was 77,016, and that which departed was 67,829. Of the number of American vessels and their tonnage, there were entered 72,009 tons, and departed 63,022, giving employment in repeated voyages, to 3,907 seamen, and there were registered in that year 448 seamen. The hospital money received from seamen amounted to \$4,111-13.—\$2,934-97 were received from registered vessels, contributed by 4082 seamen, and \$1,176-34 from enrolled and licensed vessels, contributed by 1173 seamen.

During the same period, six vessels, tonnage 791,80

surrendered their registers, and were enrolled and licensed. 7 enrolled and licensed vessels, tonnage 923, took registers,—3 vessels, tonnage 257, had their registers changed in consequence of the alteration in their construction. New registers were issued for 64 vessels, tonnage 13,534 tons. The enrolments and licenses of 78 vessels, tonnage 5,033, were changed in consequence of new owners.

The imports into the state amounted to \$8,702,122; the exports to \$4,291,793. The whole amount of the exports of the United States for 1830, was \$73,849,508, and that of the imports, \$70,876,920, and the excess therefore of the exports was \$2,972,588. Of this excess, Pennsylvania contributed her fair proportion, and consequently exported more than she imported. If we add therefore to her imports, one million for goods from Baltimore and New Orleans, we have safely estimated her exports at ten millions of dollars. But when it is considered that this amount of exports does not include her flour, her iron, or coal, shipped coastwise, we must estimate the commercial products of the state much higher.

The quantity of flour inspected at Philadelphia in 1831 was 474,076 barrels. We might perhaps double this quantity, for the amount of flour, or equivalent of grain exported, much of which passes to Baltimore and to New Orleans.

The coal business has already become a very important item in the trade of Pennsylvania.

There is every reason to believe, that the demand and supply will increase for many years in the same ratio, until a million of tuns per annum will be produced, And this amount is far within the bounds of rational conjecture. That quantity, however, will, at present prices, make a gross annual return of 6½ millions, and will employ 10,000 vessels for its transportation.

On the subject of manufactures we may observe, that we have no means to determine the precise quantity and value of the products of most branches of this kind of industry.

We give the following, as an approximation to the quantity and value of the manufactured articles, which require legislative protection.

Iron, 50,000, at an average value of 70 dollars the ton, 3,500,000. Salt, 100,000 barrels, at 5 bushels to the barrel, at \$2 the barrel, 200,000. *Cotton*.—This article employs 67 mills, with a capital of \$3,758,500, and produce for sale 2,192,865 pounds of yarn, and 21,332,467. yards of cloth employing about 30,000 men, women, and children—value of products, \$2,681,462. There are several considerable woolen manufacturies near Philadelphia and Pittsburg, and many small establishments dispersed throughout the state.

Of flint glass, there is one furnace at Philadelphia, with 6 pcts; at Pittsburg 4, with 32 pots; at Wellsburg 2, with 12 pots. Four furnaces for hollow green ware at Philadelphia, and one at Williamsport.

For the manufacture of cylinder window glass, at Pittsburg 4, at Brownsville 5, at Williamsport 1, at Brimingham 1, New Geneva 1, New Albany 1, Bridgeport 1, Perryopolis 1, Dandruff 1, Wayne county 1, and perhaps others.

Of the glass manufactories, we cannot give the quantity or value of product. The window glass and hollow ware, made at, and in the neighborhood of Pittsburg, is estimated at more than \$500,000 per annum.

The total value of manufactures, including about 250 different articles, is estimated at seventy millions of dollars!

Q. What is the state of Education in Pennsylvania?

A. Though we have a number of literary institutions,

education, is notwithstanding in a backward condition.

Q. What are the principal institutions of learning?

A. Universities, colleges, academies, common schools, lyceums, and sunday schools, &c. &c.

Q. Can you name those of a higher grade?

A. The University of Pennsylvania, one of the most useful and respectable in the commonwealth, was first chartered in 1753, and received its present form in 1780. It has a real estate valued at \$167,059,33, and an annual income of \$15,290,39;—The Western University, at Pittsburg, in 1820; Dickinson College, at Carlisle, in 1783; Franklin College, at Lancaster, in 1787, *now closed*; Jefferson College, at Cannonsburg, in 1802; Washington College, at Washington, in 1806; Alleghany College, at Meadville, in 1815; Lafayette College, at Easton, in 1826; Madison College, at Union-town; Mount Airy College, at Germantown; Pennsylvania College, at Gettysburg, in 1832; Marshall College at Mercersburg, in 1836; Had-dington College, Philadelphia, in 1836. The whole number now in operation, is ten. In this respect Pennsylvania exceeds every state in the Union.

Academies or high schools, designed for teaching the higher branches of English Education, &c. have been established in almost every county in the state; and the most of them have received pecuniary aid from the Legislature. Except the one at Litiz, under the care of John Beck. This school sustains a high reputation. The system of instruction is efficient and useful.

Besides the seminaries above mentioned, there are in Pennsylvania, an Institution for the Deaf and Dumb, an Institution for the Blind, and five Theological Seminaries, namely, the Lutheran Theological Seminary at Gettysburg, established in 1826; the Theological Seminary of the German Reformed Church, at York, established at Carlisle, in 1824, removed to York in 1826, and recently to

Mercersburg; the Western Theological Seminary, at Alleghany-town, established in 1828; and the Theological Seminary of the Associate Reformed Church, in the vicinity of Cannonsburg, established in 1834.

The learned societies are, the American Philosophical Society, instituted in 1769; Pennsylvania Academy of Fine Arts, founded in 1805; the Academy of Natural Sciences, founded in 1812; and the Pennsylvania Historical Society, founded in 1825. And a Geological Society—several Teachers Associations, &c.

Q. What is the state of common schools?

A. Though the *framers* of the constitution of Pennsylvania made provision of a general nature for the education of the *poor grates*: "*The Legislature shall, as soon as conveniently may be, provide by law for the establishment of schools throughout the state, in such manner that the poor may be taught gratis.*" Vide Constitution of Pennsylvania.

From the adoption of the constitution of 1790, until 1809, no legislative provision of a general nature was made. An act was then passed "for the education of the *poor gratis.*" It required a report to be made by the assessors of the townships, wards, and boroughs, to the commissioners of the respective counties, of all children between the ages of five and 12 years, whose parents were unable to provide for their education: and that when the lists had been approved by the commissioners, that such parents should be notified thereof, and be permitted to send their children to the most convenient schools, at the expense of the county.

This act continued in force until it was repealed by that of 29th March, 1824; providing, that every township should elect three "schoolmen," who should superintend the education of the poor children within their townships, and "cause them to be instructed as other children are

treated ; the expenses of tuition to be paid by the county." But each county might authorise the schoolmen to divide the township into school districts, and to establish schools at the township expense, to which all children belonging to the district might be sent for 3 years; at any time between the ages of 6 and 14 years. This law was applicable to the whole state, with the exception of certain school districts in the city and county of Philadelphia, and city and county of Lancaster. It was repealed in 1826, and the act of 1809 was revived.

By the act of 2d April, 1831, however, the basis of an efficient school fund was laid. The Secretary of the Commonwealth, the Auditor General, and the Secretary of the Land Office were appointed commissioners to receive and manage the school fund, with power to receive and hold for the use thereof, all gifts, grants, and donations that might be made thereto ; and all the monies due the commonwealth by the holders of unpatented lands ; also all monies secured to the commonwealth by mortgages or liens on land for the same ; as also all fees received in the land office, with the addition of the sum of one mill on the dollar, added to the county rates by the act of the 25th March, 1831, are assigned to the common school fund, and held by the commonwealth for the use thereof, at the interest of five per cent. per annum. The interest is directed to be added to the principal as it becomes due, and the whole amount to be holden by the commonwealth, subject to the payment of interest on loans made to the state for internal improvements, until the interest shall amount to one hundred thousand dollars annually, after which the interest is to be distributed annually for the support of common schools throughout the commonwealth, in such manner as shall hereafter be provided by law.

By the legislature of 1833, \$75,000 were appropriated

for distribution among the different counties, on condition that the people of each school district raise by tax, double that sum.

Another appropriation is annually made of \$100,000 by the United States Bank of Pennsylvania, for and in consideration of banking privileges, for the term of 30 years.

Thus, at present, 1836, \$175,000 are appropriated for distribution among the different counties, according to *An Act to consolidate and amend the several acts relative to a system of Education by Common Schools*, passed and approved June 13, 1836.

We here insert a synopsis of the act of 1836.

Every township, and every borough, not connected with the township in the assessment of county rates, not within the city and incorporated districts of the county of Philadelphia, constitutes a school district; and in each district are six school directors, elected on the day when constables are elected—these may authorize a tax to be laid necessary for school purposes, not less than equal to, nor more than treble, the amount which the district is entitled to receive from the general state appropriation; and for the purpose of raising any additional sum that may be deemed necessary, meetings shall be called of the taxable inhabitants of the township or district, by the directors, on the first Tuesday of May annually; notice of the time and place of holding such election being first given by at least six advertisements put up at the most public places in such township or district, for the space of two weeks, a majority of whom shall decide, by ballot, how much and what additional sum shall be raised for school purposes; and any additional sum so authorized, shall be assessed and collected, paid over and distributed in the same manner that is provided by this act.

The assessor of every ward, township, or borough, composing any school district as aforesaid, shall upon

demand furnish the school directors of the district with a correct copy of the last adjusted valuation in the same for county purposes; whereupon the board of directors shall, on or before the first day of June, annually, proceed to levy and apportion the said tax as follows, viz:

1. On each male taxable inhabitant of the district, a poll tax at their discretion, not exceeding 50 cents.

2. On all offices and posts of profit, professions, trades and occupations, and on all single freemen, above the age of 21 years, who do not follow any occupation, not exceeding the amount assessed on the same for county purposes.

3. On personal property which was made taxable by an act entitled "An act assessing a tax on personal property, to be collected with the county rates and levies, for the use of the commonwealth," passed the twenty-fifth day of March, one thousand eight hundred and thirty-one; and the said property shall continue to be assessed according to the provisions of said act, and upon all property now taxable for county purposes: *Provided*, That said act taxing personal property, shall not be so construed as to make widows dower liable to the payment of taxes, and upon all property, now taxable for county purposes.

If the citizens of a district will accept of the provisions of the law, which must be decided by a majority, then the directors may also hold property for the use of the schools in said district. If the citizens of a district reject the act, then the old act of 1809, remains in force in that district.

The Secretary of the commonwealth is general superintendent of all the schools.

Besides the general provisions for education above noticed, special ones have been enacted for portions of the state. Thus in 1818, the city and county of Philadelphia were erected into a district, called the "first school dis-

trict" of Pennsylvania. By the act of April 1, 1822, the city and county of Lancaster* was erected into the "second school district," with privileges and duties similar to the first. By the act of 11th April, 1827, the same system was established at Harrisburg; and by act of Feb. 19, 1828, at Pittsburg.

Q. Are there other modes of diffusing general and scientific knowledge, than through the medium of Colleges, Academies, and Common Schools, among the people?

A. There are; such as Lyceums, Sunday Schools, Tract Societies, Bible Societies, and Newspapers.

Q. What are Lyceums?

A. Lyceums are voluntary literary associations for mental improvement.

Q. Where was the first Lyceum of any extent organized in Pennsylvania?

A. The first is the *Pennsylvania Lyceum*, organized the 19th of August, 1835. Soon after, a number of county, township, school, and other lyceums were organized by JOSIAH HOLBROOK and I. DANIEL RUPP, of Cumberland county, agents for the Pennsylvania Lyceum, who visited various parts of the state under the direction of the board of managers. These associations have already done incalculable good in the general diffusion of knowledge among the people. The system of instruction is of a peculiar character.

Sunday Schools, Bible, Tract, and Temperance Societies are numerous, and have exerted a very salutary influence upon the people.

* If the city of Lancaster will adopt the act of 1836, then the act of 1822, and the supplement thereto of 1823, will be null and void in the city.

Q. What is the state of Religion in Pennsylvania ?

A. If the number of societies is a criterion to judge deep toned piety and religion, then would Pennsylvania have her share, with other states, of *religion*.

There are a great variety of religious societies in this state; and yet, perhaps, with all these societies, and different denominations, no state in the Union, in which the varieties of origins, opinions, faith, fashions, and modes of life, amalgamate into a more marked and distinct nationality, than in the people of this state.

Q. What are the principal Church divisions, or Denominations, as they are called ?

A. The following table exhibits at one view the religious denominations, &c. in Pennsylvania.

DENOMINATIONS.	Number of Churches.	Number of Ministers.	Number of Members.
Presbyterians, (3 synods)	476	337	50,988
Methodist Episcopal,		252	74,106
Evangelical Lutheran Church,	311	92	33,124
German Reformed,	150	50	15,000
Baptist,	157	121	11,103
United Brethren, (Moravians,)	11	19	2,900
Associate Presbyterians,	12	36	2,650
Reformed Dutch Church,	8	8	1,671
Friends,	150		
Protestant Episcopal,		71	
Roman Catholics, (2 bishops,)	56	42	
New Jerusalem, (Swedenborgians,)	7	5	
United Brethren in Christ,		35	3,500
German Dunkards, (Taufefer,)		25	7,000
Evangelical Society, (Albrights,)		42	4,300
Seventh Day Baptists,		5	3,000
Freewill Baptists,		12	1,000

"Church of God,"*	30	2,000
Protestant Methodists,	20	1,500
Disciples, (Campbellites)	6	600
Omish,	20	3,500
Universalists,	12	†
Jews, (2 Synagogues,)		

Q. What is the plan for supporting the Poor, and whence its origin?

A. The plan for supporting the poor in Pennsylvania had its origin in England. It is thought that some better system might be adopted; that the present, while it is oppressive to the industrious, is calculated to encourage indolence and vice among the poor. In every township, officers are appointed to superintend the poor, whose business is to raise taxes, contract for the board and employment of the poor, to put out, as apprentices, orphan children, and others, who have not parents capable of attending to them, &c.

Each township is required to support its own poor only, and is allowed to remove such paupers as belong to other parts of the state.

In most of the south-eastern and central counties, the plan for supporting the poor, is somewhat improved. Alms-houses are erected on large farms, where the poor find employment, and thus aid in supporting themselves.

Q. What may be said of Pennsylvania touching prison discipline?

A. To the praise of Pennsylvania, it may be said, that from the earliest period, she has made continued efforts

* By the "*Church of God*," is not meant a sectarian denomination, but simply what it signifies in the Bible, viz: *Ministers and People*, who are formed into *free and independent churches*, upon the *Apostolic or New Testament plan*, without *human names, laws, and inventions*.

† Call all "*brethren*."

to improve prison discipline, and mitigate the sufferings of the prisoner. The intercourse, which prisoners have been allowed to have with each other, has been, most injurious in its effects. It has not only prevented reformation, but conducted to render more outrageous the lawless offender. Effects so injurious, suggested the plan of solitary confinement.

Such an idea was strenuously opposed, and many arguments were urged against it. By persevering efforts, the objections were removed, the legislature was induced to adopt the plan, and two penitentiaries have been erected, solely with a view to solitary confinement. One is located at Philadelphia, and is called the Eastern Penitentiary; the other, at Pittsburg, is called the Western Penitentiary.

"The Eastern Penitentiary, is situated in Spring Garden, on one of the most elevated, airy, and healthy sites near Philadelphia. The ground, occupied by it, contains about ten acres. The material, with which it is built is gneis, in large masses. Every room is vaulted, and fire proof. The design and execution impart a grave, severe, and awful character to the external aspect. The effect on the imagination is peculiarly impressive, solemn, and instructive. This is said to be the largest edifice in this country, and is the only one, which conveys an idea of the external appearance of those magnificent and picturesque castles of the middle ages, which contributed, so eminently, to embellish the scenery of Europe."

"The front of this edifice is composed of large blocks of hewn stone. The walls are twelve feet thick at the base, and diminish at the top, where they are two and a half feet in thickness. A wall thirty feet in height, encloses an area six hundred and forty feet square. At each angle of the wall, is a tower for the purpose of overlooking the establishment. Three other towers are situated near the gate of entrance. The facade, or principal front,

is six hundred and seventy feet in length. In the centre of the front, there is building two hundred feet in length, and consists of two projecting massy square towers, 50 feet high. The munnioned windows in these towers, contribute, in a high degree to the picturesque effect."

"The great gateway, in the centre, is a very conspicuous feature. It is 27 feet high, 15 wide, and is filled by a massive wrought iron portcullis, and double oaken gates, studded with projecting iron rivets, the whole weighing several tons, yet they can be opened with the greatest facility. A lofty rectangular tower, 80 feet high, designed to contain an alarm bell and a clock, surmounts this entrance, and forms a picturesque and proportional centre. On each side of the main building, (which contains the apartments of wardens, keepers, domestics, &c.,) are screen wing walls, which appear to constitute portions of the main edifice."

"In the centre of the great court, is an observatory, whence long corridors, seven in number, radiate (only 3 or 4 of them are at present finished.) On each side of these corridors, the cells are situated. A novel and ingenious contrivance, in each cell, prevents the possibility of conversation, preserves the purity of the atmosphere, and dispenses with the otherwise unavoidable necessity of leaving the apartments, except when the regulations permit. Flues conduct heated air from large cockle stoves to the cells. Light is admitted by glass in the crown of the arch. The cells are 11 feet 9 inches long, 7 feet 6 inches wide. At the extremity is a door way, leading to a yard, attached to each cell in the lower story. These yards 18 feet by 8; the walls of which are 11 and a half feet high."

The cost of this building, when completed, will probably exceed a million.

The prisoners are required to clean their rooms once a

week, water being conveyed to them by means of pipes. Their washing and mending are regularly attended to; they have straw to sleep on, plenty of wholesome food to eat, and when sick, a physician attends them, and they have food suited to their necessities.

“This system of punishment, is emphatically called the system of Pennsylvania, and consists in solitary confinement at labor, with instructions in labor, in morals, and religion. It is an experiment, in the success of which all good men are interested. The prospect of a beneficial result is highly flattering as it relates to the morals of the prisoners, and the means of supporting them from the produce of thier labors.”

“When a convict first arrives, he is placed in a cell, and left alone without work, and without any book. His mind can only operate on itself. Generally, but a few hours elapse, before he petitions for something to do, and for a Bible. No instance has occurred, in which such a petition has been delayed more than a day or two. If the prisoner has a trade, that can be pursued in his cell, he is put to work as a favor; as a reward for good behaviour, a Bible is given him. If he has no trade, or one that cannot be pursued in his cell, he is allowed to choose one that can, and is instructed by one of the overseers. Thus work, and moral and religious instruction are regarded, and received as favors, and are withheld as punishments.”

The prisoners have not only a physician to attend to their bodies, but one to attend to their souls. When they have preaching, the outer doors of their cells are opened. The preacher stands near the end of the corridor, where all the prisoners can hear, while they can neither see the preacher, nor see each other. There, in awful silence, they listen to those truths which must have a bearing on their destinies for eternity.

As we may gaze on the impenetrable walls, high towers, long narrow windows, double oaken, iron-rivited doors of this prison, our strength becomes weakness, and we reflect on the awful tendency of crime. As we enter the solitary cells, examine the thicknes of the walls, the doors bolted and barred, we think of that prison which will be the abode of the impenitent forever.

Q. What is the amount of the Banking Capital of Pennsylvania.

A. The following table, collated from the Auditor General's Report for 1835 and '36, and from the pamphlet laws of the sessions of 1835-36, gives a brief view of the Banking Capital of Pennsylvania.

BANKS.	CAPITAL.
Bank of Pennsylvania,	\$2,500,000
Philadelphia Bank,	1,800,000
Girard Bank,	1,500,000
Farmers' and Mechanics' Bank,	1,250,000
Mechanics' Bank of the city and } county of Philadelphia,	1,034,740
Bank of North America,	1,000,000
Commercial Bank of Pa.	1,000,000
Schuylkill Bank, city of Philadelphia,	997,275
Western Bank of Philadelphia,	500,000
Manufacturers' and Mechanics' } Bank, Northern Liberties,	300,000
Bank of Northern Liberties,	300,000
Southwark Bank,	250,000
Kensington Bank,	250,000
Penntownship Bank,	249,880
Moyamensing Bank,	125,000
Bank of Germantown,	152,000
Bank of Delaware county,	104,450
Bank of Montgomery county,	133,650
Bank of Chester county,	210,000
Farmers' Bank of Bucks county,	60,000
Doylestown Bank,	60,000

Easton Bank,	347,505.
Northampton Bank,	124,685
Farmers' Bank of Lancaster,	400,000.
Lancaster Bank,	139,432.
Columbia Bridge Company,	395,000
York Bank,	185,592
Harrisburg Bank,	300,000
Middletown Bank,	79,715.
Miners' Bank,	199,740
Farmers' Bank of Reading,	300,360.
Carlisle Bank,	213,622.
Northumberland Bank,	100,000
Wyoming Bank,	58,665.
Lebanon Bank,	68,130
Gettysburg Bank,	122,333
Chambersburg,	258,582
Merchants' and Manufacturers' }	
Bank of Pittsburg, }	599,550.
Bank of Pittsburg,	875,050.
Monongahela Bank,	107,331
Lewistown Bank,	71,380
Towando Bank,	150,000
Lumberman's Bank, at Warren,	100,000
Erie Bank,	25,700

NOTE.—The above is the amount of the capital stock paid in.

SAVINGS INSTITUTIONS.	CAPITAL.
Lancaster,	\$3,800.
Harrisburg,	13,235
Pittsburg,	20,248
Philadelphia,	173,140

The following Banks were incorporated in 1836, viz:

BANKS.	CAPITAL.
United States Bank,	\$35,000,000
Exchange Bank of Pittsburg,	1,000,000
Franklin Bank,	300,000.
Honesdale Bank,	100,000.
Bank of Berks county,	200,000.

The following had their capital increased, per act of 1836, viz :

Farmers' Bank of Bucks Co.,	from \$60,000 to \$200,000
Lumberman's Bank,	" 100,000 to 200,000
Manufacturers' and Mechanics' } Bank, Northern Liberties, }	300,000 to 600,000
Penntownship Bank,	229,880 to 500,000

Q. What are the sources of Revenue of Pennsylvania ?

A. They are various and numerous. That you may have some idea we give a "Summary Statement" of the Receipts at the State Treasury, commencing November 1, 1834, and ending October 31, 1835.

Lands and Land Office fees,	\$26,395 94
Auction commissions,	10,900 00
Auction duties,	57,252 03
Dividends on bank stock,	150,730 00
Dividends on bridge, turnpike, } and navigation stock, }	28,458 08
Tax on bank dividends,	68,508 13
Tax on certain offices,	13,783 66
Tax on coal companies,	1,314 10
Tavern licenses,	57,826 56
Retailers' licenses,	80,727 84
State maps,	110 00
Pamphlet laws,	159 24
Collateral inheritance tax,	32,166 56
Militia and exempt fines,	787 63
Tin and clock pedlars' licenses,	1,625 00
Hawkers' and pedlars' licenses,	4,237 05
Increase of county rates and levies,	188,019 94
Tax on personal property,	20,943 10
Canal and railroad tolls,	684,357 77
Loans,	1,629,660 00
Premiums on loans,	120,916 60
Premiums on bank charters,	66,698 99
Tax on writs, &c.	24,745 91
Fees of the Secretary of State's Office,	456 01
Old debts and miscellaneous,	2,904 07
Total,	\$3,273,563 21

Q. What is the early history of Pennsylvania?

A. William Penn, the son of a British admiral of London, was educated as a lawyer, but from some peculiarity of habit, joined the Quakers, then an obscure and persecuted sect, with a view to seek an asylum for the oppressed, and in consideration of services rendered by his father to the British crown, excepted of a tract of land, granted to him by Charles II. King of England, in 1681. This tract lay on this side of the Atlantic, including Pennsylvania and Delaware

In the Autumn of 1681, numerous emigrants to whom Penn had sold a part of the land, came over to America in three vessels, and settled on the Delaware river, near where Philadelphia is now located.

These people brought with them a letter from Penn to the Indians, in which he informed them, that the great God had been pleased to make him concerned in their part of the world, and that his king had given him a large tract of country therein, but that he did not intend to take possession of it without their consent, that he was a man of peace, and that the people whom he sent were peaceable too, and if any difficulty should occur between them, it might be settled by an equal number of men on both sides.

In the fall of 1682, Penn himself came over with 200 people. During his stay, he assembled some of the Indian chiefs and formed a treaty with them. His mild and affable deportment made a most favorable impression on the minds of the savages. He walked with them, sat with them on the ground, and ate with them of their roasted corn and hominy.

With this they were greatly delighted, and to express their joy began to hop and jump. They were much pleased with Penn, and long remembered him with respect and affection. This treaty, which was never violated, was made under a great elm tree near Kensington, not far from

the river. During the ceremony, Penn wore, as a mark of distinction, a sash of blue net work. This sash still exists in England.

This memorable tree, called the *treaty tree*, was blown down on the 3d of March, 1812. Many articles have since been made of its wood, which are highly prized as relics. It was a wide spreading tree, the main branches were 150 feet in length, the circumference 24 feet, and the age of the tree was 283 years. To perpetuate its memory, a rectangular marble monument has been erected, near the site where it stood.

Penn founded the city of Philadelphia in 1681, and in 1684, he returned to England, leaving the colony in a flourishing state. The first settlers, however, had many privations to endure, and were obliged to live in caves, till they were able to erect better dwellings.

Most of these habitations were dug in the side of a high bank, on the east side of Front street, and where half below the ground and half above. The upper part of the cave was constructed of sods and brush wood, and roofed with bark and branches of trees. The chimneys were often of grass and kneaded clay. The ground, on the Delaware where these caves were dug, was very high, and thickly covered with pine trees.

Pennsylvania had a more rapid growth than either of the other colonies. This was owing partly to a healthy climate, fruitful soil, abundance of wild game; partly to the benefits, which resulted from the experiments made by other colonists, and partly to the religious toleration, mildness and justice of laws, and their administration. Attracted by these favorable circumstances, numerous emigrants flocked to Pennsylvania, and in four years after the province was granted to Penn, it contained twenty settlements and the city of Philadelphia 2,000 inhabitants.

Penn returned to the province in 1699, and found some discontent among the people. To remove this, he gave them a new charter, which was submitted to the assembly, and accepted. But the people, in that part of the settlement, which now forms the State of Delaware, were displeased with the charter, refused to accept of it, were separated from Pennsylvania, and became a distinct assembly.

This was Penn's last visit to America. Returning to England soon after, he died there in 1718, having sustained a most excellent character. He was persecuted on account of his religious principles, accused of wicked conduct, and twice imprisoned by order of government. But he nobly sustained these trials, lived to see every suspicion wiped from his character, and his life teaches us, that "when a man's ways please the Lord, he maketh, even his enemies, to be at peace with him."

A tide of prosperity continued to flow into this colony the Indians remained at peace for 70 years, and the lasting prosperity of Pennsylvania is an elegant eulogium on the character of Penn. (*See Parley's History.*)

Principal Stage Routes in Pennsylvania,

1. From Phila- delphia to Pitts- burg.	Miles.	Miles.		Miles.	
From Phila. to			Middletown,	7	88
Buck tavern	10		High Spire,	3	91
Paoli	9	19	HARRISBURG,	6	97
West Whiteland,	5	24	Hogestown,	9	106
Downingtown,	5	29	Carlisle,	9	115
Coatesville,	7	36	Stoughstown,	13	128
Sadsbury,	3	39	Shippensburg,	8	136
Paradise	13	52	Green Village,	6	142
Lancaster,	10	62	Chambersburg,	5	147
Mount Joy,	12	74	St. Thomas,	9	156
Elizabethtown,	7	81	Loudontown,	6	162
			McConnellsburg,	7	169
			Juniata Crossings,	20	189

	Mls.	Mls.
<i>Bedford,</i>	15	204
<i>Schellsburg,</i>	9	213
<i>Stoystown,</i>	20	233
<i>Laughlintown,</i>	16	249
<i>Ligonier,</i>	3	252
<i>Youngstown,</i>	10	262
<i>Greensburg,</i>	10	272
<i>Adamsburg,</i>	6	278
<i>Stewartsville,</i>	5	283
<i>Pittsburg,</i>	18	301

2. *From Philadelphia to Pittsburg, via Columbia and York.*

<i>From Phila. to Lancaster, as in No. 1</i>	62	
<i>Colombia,</i>	10	72
<i>York,</i>	12	84
<i>Abbott's town,</i>	15	99
<i>Oxford,</i>	5	104
<i>Gettysburg,</i>	9	113
<i>Chambersburg,</i>	25	138
<i>Pittsburg, as in No. 1</i>		153

3. *From Philadelphia to Baltimore, via Wilmington, Del.*

<i>From Phila. to Darby,</i>	7	
<i>Chester,</i>	8	15
<i>Marcus Hook,</i>	5	20
<i>Wilmington, Del.</i>	8	28
<i>Newport,</i>	5	33
<i>Staunton</i>	1	34
<i>Christiana,</i>	4	38
<i>Newark,</i>	5	43
<i>Elkton,</i>	5	48
<i>North East,</i>	6	54
<i>Charleston,</i>	3	57
<i>Havre de Grace,</i>	7	64

<i>Hall's Cross Roads,</i>	5	69
<i>Harford,</i>	6	75
<i>Little Gun Powder,</i>	7	82
<i>Baltimore,</i>	16	98

4. *From Philadelphia to Baltimore, via Port Deposit.*

<i>From Phila. to Darby,</i>	7	
<i>Nether Providence,</i>	6	13
<i>Concord,</i>	8	21
<i>Kennett's Square,</i>	12	33
<i>New London Cross Roads,</i>	10	43
<i>Port Deposit,</i>	18	61
<i>Herbert's X Roads,</i>	8	69
<i>Bell Air,</i>	6	75
<i>Kingsville,</i>	7	82
<i>Baltimore,</i>	16	98

5. *From Philadelphia to Lancaster, via West Chester.*

<i>From Phila. to Haverford,</i>	12	
<i>Newton,</i>	5	17
<i>West Chester,</i>	10	27
<i>Marshallton,</i>	4	31
<i>Gap,</i>	17	48
<i>Strasburg,</i>	7	55
<i>Lancaster,</i>	8	63

6. *From Philadelphia to Mauch Chunk, via Pottsville.*

<i>From Phila. to Norristown,</i>	17	
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	Mis.	Mis.
Trap,	9	26
Pottstown,	10	36
Reading,	16	52
Hamburg,	15	67
Orwigsburg,	11	78
Pottsville,	8	86
Middleport,	8	94
Tuscarora,	4	98
Tamaqua,	5	103
Mauch Chunk,	15	118

7. *From Philadelphia to Lancaster, via the Yellow Springs.*

From Phila. to	15	
Gulf Mills,	6	21
Valley Forge,	6	27
Kimberton,	4	31
Yellow Springs,	14	45
Marsh,	4	49
Churchtown,	5	54
Earl,	3	57
New Holland,	9	66
Leacock,	4	70
Lancaster,		

8. *From Philadelphia to Montrose*

From Phila. to	3	
Rising Sun,	3	6
Germantown,	3	9
Chesnut Hill,	8	17
Spring House,	4	21
Montgomery Square,	4	25
Lexington,	7	32
Sellersville,	5	37
Quakertown,	6	43
Freyburg,	8	51
Bethlehem,	5	56
Hecktown,	3	59
Nazareth,		

	Mis.	Mis.
Jacobsburg,	3	62
Wind Gap,	18	80
Mount Pocono,	12	92
Wilkesbarre,	18	110
Kingston,	1	111
New Troy,	4	115
Exeter,	9	124
Eaton,	2	126
Tunkhannock,	15	141
Springville,	10	151
Montrose,	13	164

8. *From Philadelphia to Norristown.*

From Phila. to	1	
Penn township,	6	7
Manayunk,	1	8
Roxborough,	9	17
Norristown,		

10. *From Philadelphia to Easton.*

From Phila. to	3	
Rising Sun,	7	10
Jenkintown,	3	13
Willow Grove,	3	16
Horseham,	8	24
Doylestown,	4	28
Danboro',	11	39
Ottsville,	8	47
Durham,	9	56
Easton,		

11. *From Philadelphia to Winchester, Va.*

From Phila. to	62	
Lancaster as in No. 1	10	72
Columbia,		

OF PENNSYLVANIA.

169

	Mls.	Mls.
York,	12	84
Pigeon Hill,	8	92
Hanover,	10	102
Petersburg,	7	109
Tawneytown, Md.	9	118
Bruceville;	5	123
Middleburg,	2	125
Woodsborough,	9	134
Walkersville,	5	139
Frederick,	6	145
Trap,	7	152
Petersville,	4	156
Knoxville,	4	160
Harpers Ferry, Va.	6	166
Charleston,	7	173
Winehester,	22	195

12. From Harrisburg to Dundaff.

From Harrisb. to

Dauphin,	9	
Peters Mountain,	6	15
New Buffalo,	5	20
Montgomery's Ferry.	6	26
Liverpool,	5	31
M'Kee's Haly Falls,	9	40
Selins Grove,	12	52
Sunbury,	2	53
Northumberland,	2	56
Dantille,	12	68
Bloomsburg,	9	77
Berwick,	12	89
Nanticoke,	17	106
Wilkesbarre,	9	115
Pottstown,	10	125
Greenville,	17	142
Dundaff,	10	152

13. From Harrisburg to Pittsburg, via Huntingdon.

From Harrisb. to

Juniata Falls,	14
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	Mls.	Mls.
Millerstown,	15	29
Thompsontown,	6	35
Mexico,	5	40
Mifflin,	3	43
Lewistown,	12	55
Waynesburg,	11	66
Huntingdon,	22	88
Alexandria,	8	96
Yellow Springs,	6	102
Frankstown,	9	111
Hollidayburg,	3	114
Blair's Gap,	4	118
Munster,	10	128
Ebensburg,	5	133
Armagh,	18	151
Blairsville,	14	165
New Alexandria,	8	173
Salem Cross Road,	8	181
Murrysville,	7	188
Pittsburg,	20	208

14. From Harrisburg to Baltimore.

From Harrisb. to

Highspire,	6	
Middletown,	3	9
Falmouth,	4	13
York Haven,	1	14
York,	10	24
Logansville,	7	31
Strasburg,	7	38
Weisesburg, Pa.	10	48
Hereford,	3	51
Baltimore,	21	72

15. From Pittsburg to Steubenville.

From Pittsb. to

Raccoon Creek,	23	
Briceland's X Roads,	4	27
Steubenville,	10	37

	Mls.	Mls.		Mls.	Mls.
16. <i>From Pittsburg to Erie.</i>			Nescopeck,	9	6
From Pittsb. to			Berwick,	1	68
Bakerstown,	16		New Columbia,	10	78
Woodville,	6	22	Thinerville	24	102
Butler,	8	30	<i>Towanda,</i>	24	126
Centreville,	15	45	Burlington,	8	134
Mercer,	16	81	Ridgebury,	12	146
Meadville,	30	91	<i>Elmyra,</i>	12	158
Waterford,	23	114			
Erie,	15	129			
17. <i>From Pittsburg to Wheeling.</i>			20. <i>From Easton to Pleasant Mount.</i>		
From Pittsb. to			From Easton to		
Hariotsville,	10		Wind Gap,	13	
Canonsburg,	8	18	Stanhope,	20	33
Washington,	7	25	Sterling,	25	48
Wheeling,	36	61	Clarkstown,	10	68
			Pleasant Mount,	12	80
18. <i>From Pittsburg to Beaver.</i>			21. <i>From Easton to Harrisburg.</i>		
From Pittsb. to			From Easton to		
Sewickly Bottom,	14		Butztown,	7	
Economy,	4	18	Bethlehem,	5	12
Beaver,	10	28	Allentown,	6	18
			Trextertown,	8	28
			Kutztown,	9	35
			Reading,	18	53
			Womelsdorf,	14	67
			Myerstown,	7	74
			Lebanon,	6	80
19. <i>From Easton to Almyra, N. York.</i>			Palmyra,	10	90
From Easton to			Hummelstown,	6	96
Bath,	10		Harrisburg,	9	105
Kernsville,	5	15			
Cherryville,	4	19			
Lehigh Gap,	4	23	22. <i>From Easton to Milford.</i>		
Lehigton,	8	31	From Easton to		
Mauch Chunk,	5	36	Richmond,	14	
Lausanne,	1	37	Mount Bethel,	4	18
Conyngham,	21	58			

	Mls.	Mls.
Dutotzburg,	7	25
Stroudsburg,	4	29
Coolbaugh's,	7	36
Bushkila,	6	42
Dingman's Ferry,	13	55
Milford,	8	63

23. *From Lewistown to Erie.*

From Lewist. to		
<i>Belleville,</i>	30	
Millersburg,	2	32
Philipsburg,	24	56
Kylersville,	8	64
<i>Clearfield,</i>	8	72
Curwinstown,	5	77
Brookville,	35	112
Clarion,	9	121
Strattonsville,	6	127
Shippensburg,	9	136
<i>Franklin,</i>	23	159
<i>Meadville,</i>	24	183
<i>Erie,</i>	38	221

24. *From Ebensburg to Butler.*

From Ebensburg. to		
<i>Indiana,</i>	26	
<i>Kittanning,</i>	26	52
<i>Butler,</i>	20	72

25. *From Harrisburg to Winchester, Va.*

From Harrisb. to	
Hogestown,	9

	Mls.	Mls.
<i>Carlisle,</i>	9	18
Stoughstown,	13	31
Shippensburg,	8	39
Green Village,	6	45
<i>Chambersburg,</i>	5	50
Greencastle,	11	61
<i>Hagerstown, Md.</i>	11	72
Funkstown,	3	75
Boonsborough,	8	83
Sharpsburg,	7	90
Shepherdstown, Va.	4	94
Martinsburg,	9	103
Darkesville,	7	110
Winchester,	15	125

26. *From Reading to Lancaster.*

From Reading to

Adamstown,	10	
Reamstown,	5	15
Ephrata,	4	19
Lititz,	8	27
Neffsville,	4	31
Lancaster,	4	35

27. *From Pottsville to Belleville via Williamsport.*

From Pottsv. to

<i>Danville,</i>	32	
Washingtonville,	8	40
Derry,	5	45
Pennsborough,	14	59
Williamsport,	14	73
Jersey Shore,	11	84
Dunnstown,	10	94
<i>Belleville,</i>	24	118

	Mls.	Mls.
28. <i>From North- umberland to Lewistown.</i>		
<i>From Northum- berland to</i>		
<i>New Berlin,</i>	11	
<i>Middlebury,</i>	5	16
<i>Beavertown,</i>	6	22
<i>Lewistown,</i>	28	50

29. <i>From Bedford to Washington.</i>		
<i>From Bedford to</i>		
<i>Somerset,</i>	37	
<i>Mount Pleasant,</i>	25	62
<i>Robstown,</i>	14	72
<i>Williamsport,</i>	10	86
<i>Washington,</i>	20	106

	Mls.	Mls.
30. <i>From Harris- burg to Hagers- town, Md.</i>		
<i>From Harrisb. to</i>		
<i>Carlisle,</i>	18	
<i>Manallen,</i>	18	36
<i>Gettysburg,</i>	9	45
<i>Fairfield,</i>	8	53
<i>Waynesboro,'</i>	13	66
<i>Leitersburg, Md.</i>	6	73
<i>Hagerstown,</i>	6	78

OHIO.

Q. How is Ohio bounded?

A. It is bounded on the north by lake Erie and the State of Michigan; on the east by Pennsylvania; on the south and southeast by the Ohio river; and on the west by Indiana. This state bounds on the Ohio river, from the mouth of Little Beaver to that of the Great Miami, 445 miles; due north in common with Indiana, 170 miles; due east along Michigan to lake Erie, 80 miles; thence along the southern shore of Erie, 150 miles; thence south in common with Pennsylvania, to the mouth of Little Beaver, 93 miles; having an entire outline of 933 miles.

Q. What is the area of Ohio?

A. The superficial contents of Ohio have been generally underrated; measured carefully on Bradford's map, and exactly calculating the rhombs, the area comes out within a small fraction of 44,000 square miles.

Q. How many acres does Ohio contain?

A. According to the most accurate calculations it contains about 25 million acres of land.

Q. What is the latitude and longitude of this state?

A. It extends from 38 deg. 30 min. to 42 deg. north latitude, and from 80 deg. 35 min. to 84 deg. 47 min. W. lon. from Greenwich.

Q. Are there any mountains in Ohio?

A. This state is altogether free from mountains. Some

parts bordering on the Ohio river are hilly, but not mountainous. Some hills lie on either side of the Ohio river of a singular conformation, generally known by the name of the Ohio Hills.

Q. Which are the principal Rivers of Ohio?

A. The Ohio, the Muskingum, the Sciota, the Big Miami, the Little Miami, the Maumee, the Sandusky, Cuyahoga, and Grand River.

Q. Can you describe the Ohio river?

A. The Ohio, (or River of Blood, or according to some the Limpid River,) is formed by the junction of the Alleghany and Monongahela at Pittsburg.

If the Mississippi has more grandeur, the Ohio has clearly more beauty. If the Mississippi rolls its angry and sweeping waters with more majesty, the Ohio far exceeds it in its calm unbroken course, which seldom endangers the boats on its bosom, except there be mismanagement or storms. No river in the world rolls for the same distance such an uniform, smooth, and peaceful current. Whoever has descended this noble river in the spring, when its banks are full, and the beautiful red bud, and *Cornus Florida* deck the declivities of the bluffs, (which sometimes rise 300 feet in height, impend over the river, and cast their grand shadows into the transparent waters, and are seen at intervals in its luxuriant bottoms while the towering sycamore throws its venerable and majestic arms, decked with rich foliage, over the other trees,—but will readily acknowledge the appropriateness of the French name, "*La Belle Riviere*."

Its bottoms are of extraordinary depth and fertility generally high and dry, and for the most part healthy.—For 30 miles below Pittsburg, its course is N. W. It then turns W. S. W., and pursues that general direction 500 miles. Thence S. W. 170 miles. Thence westward 280

miles. Thence S. West through -that low and swampy country till it joins the Mississippi, 170 miles.

Between Pittsburg and its mouth, it is diversified by 100 considerable islands, besides a great number of tow heads and sand bars, which in low stages of the water greatly impede the navigation. Some of these islands are of exquisite beauty, and afford most lovely situations for retired farms. The passages between them and the sand bars at their head, are among the difficulties of the navigation of this river.

It is bounded in its whole course by bluffs, sometimes towering sublimely from the shores of the river. At Pittsburg the Ohio is 600 yards wide, and at Cincinnati, which may be considered its mean width, it is not much more. Its valley is deep and heavily timbered, and has no where the slightest indication of prairie. Different estimates have been made of the rapidity of its current. This rapidity being continually varying, it would be difficult to assign any very exact estimate. It is found, according to the different stages of the water, to vary between one and three miles. In the lowest stages of the water in the autumn, a floating substance would, probably, not advance a mile an hour. It is subject to extreme elevations and depressions. The average range between high and low water is probably 50 feet. Its lowest stage is in September; and its highest in March. It has been known to rise 12 feet in a night. The Ohio and all its tributaries cannot have less than 5000 miles of boatable waters, and taking all circumstances into consideration, few rivers in the world can vie with it. either in utility or beauty.

Describe the Muskingum river.

Muskingum is one of the great branches of the Ohio river, from the right or N. W. side. It is formed by two branches, Tuscarawas from the northeastward, and White

Woman's river to the northwestward. White Woman's river rises near the centre of the state of Ohio, interlocking sources with those of Scioto, Huron of Erie, Vermillion, and Black rivers. Composed of two branches, Mohiccon and Killbuck creeks, White Woman's river drains Wayne, Holmes, Richland, Knox, and part of Coshocton counties; general course S. E., joining Tuscarawas in Coshocton county, between the villages of Coshocton and Caldersburg, after a general comparative course of 60 miles. Tuscarawas has interlocking sources with those of Cuyahoga and Big Beaver. In the higher part of its course for 50 miles, it pursues a southern course, out of Medina and Portage counties over Starke into Tuscarawas county. Inflecting abruptly to the west, and entering Coshocton, it unites with White Woman's river, as already noticed, after a general comparative course of 60 miles. It is at the junction of Tuscarawas and White Woman's rivers that the united waters take the name of Muskingum, which flowing S. 10 miles, receives a large eastern branch, Will's creek, and bending to about S. S. W. 15 miles, receives Licking creek, and falls over a ledge of rocks at Zanesville. Below Zanesville, with partial bends, the general course is S. E. 50 miles comparative distance to its influx into the Ohio river at Marietta. The Tuscarawas branch drains all Tuscarawas and Stark, with parts of Harrison, Columbiana, Portage, Medina, Wayne, Holmes, and Coshocton counties. Will's creek drains, and its valley is nearly commensurate with, Guernsey county. The Muskingum river, properly so called, winds over the southern side of Coshocton, and over Muskingum, Morgan and Washington counties. The entire Muskingum valley approaches remarkably near a circle, of 100 miles diameter; but with allowance for the salient parts, the area is about 8000 square miles. The Ohio and Erie canal enter this valley in Licking county, and is car-

ried N. E. to Coshocton, and thence along the main channel of Tuscarawas to the Portage Summit. The level of the canal on the Portage Summit is 973 feet above the ocean tides, while that of the Ohio at Marietta, but little, if any, exceeds six hundred feet of similar relative height. The arable soil around the sources of the higher fountains of White Woman's and Tuscarawas rivers, must exceed one thousand feet above the ocean, or the difference of level of the valley amounts to at least an equivalent to a degree of latitude. The actual extremes of lat. are 39 degrees 20 min. and 41 degrees 10 min. The soil of the Muskingum valley is of unsurpassed fertility. The surface presenting the usual features of the rivers of Ohio; that is, level at the sources, and becoming more and more hilly approaching the main recipient, the Ohio river.

Describe the Scioto river.

Scioto river has its remote sources in Richland, Marion, Crawford, and Hardin counties. It is composed of two branches, Whetstone on the E., and Scioto proper on the W. Both branches issuing from Marion county, assume a nearly parallel course to S. S. E., traversing Delaware, and uniting in Franklin county, between the towns of Columbus and Franklin, after each branch having flowed by comparative courses, 70 miles. Below Columbus the general course is almost exactly S., and comparative length 100 miles to its influx into Ohio river, between the villages Alexandria and Portsmouth. The Sciota valley, lying between latitude 38 degrees 42 min. and 40 degrees 50 min., and cut into two very nearly equal sections by longitude 6 degrees W. from Washington city, and is about 150 miles long, and 60 miles wide, area 9000 square miles. Below Columbus, the main stream traverses the counties of Franklin, Pickaway, Ross, Pike, and Scioto. Though without any direct falls, the Scioto is a very rapid stream.

The Scioto valley lies between those of Big Miami and Muskingum, and has that of Sandusky N., and Maumee N. West.

Describe the Big Miami river.

Big Miami has its extreme sources in Shelby and Dark counties, and flowing thence S. S. E. fifty miles over Miami and Montgomery, receives in Indiana Mad river from N. E. Mad river rising in Logan, traverses Champaign and Clark, unites with Great Miami as already noticed. The two streams unite at Dayton, and assuming a course of S. S. W. flows in that direction by comparative courses 100 miles to its junction with Ohio river, having received, a few miles above its mouth, White Water river from Indiana. The boundary line between Ohio and Indiana strikes the Ohio river at the mouth of Great Miami.

The valley of the Great Miami is in length 120 miles from S. W. to N. E. with a mean breadth of 50 miles, or comprises an area of 6000 square miles. This river has become of increasing consequence since the completion of a navigable canal extending from Dayton to Cincinnati, opening a water means of transport from the interior table land of Ohio, to Ohio river, reaching the latter at the most considerable city in the state, or indeed of all the western states, except New Orleans.

Describe the Little Miami.

Little Miami has its extreme sources in Clarke county, interlocking with those of Mad river, and with those of Deer and Paint creeks, branches of Sciota, and flowing thence by comparative courses 120 miles to the S. S. E. to its entrance into Ohio river about ten miles, by water, above Cincinnati. The course of the Little Miami is very nearly parallel to that of the Great Miami, the former deriving its principal tributaries from the eastward, and draining great part of Greene, Clinton, Warren, Cler-

mont, with parts of Brown, Clarke, and Hamilton counties. Rising on a comparatively elevated tract, the fall is rapid, rendering this river one of the best in Ohio for mills.

Describe the Maumee river.

Maumee river is the greatest western confluent of lake Erie. This very remarkable river is composed of two constituent branches, the St. Mary's and St. Joseph's.—St. Mary's rises in Allen, Mercer, and Shelby counties, Ohio, interlocking sources with those of Wabash, Great Miami, and Au Glaize rivers; flowing thence 60 miles to the N. W. into Allen county, Indiana, it unites with the St. Joseph's river. The latter rising in Hillsdale county, Michigan, and assuming a southwest course traverses the northwestern angle of Williams county, Ohio, enters Allen county, Indiana, and unites with the St. Mary's as already noticed. To view those two rivers on a map, their natural course would appear to be down the Wabash, but curving on themselves, the united waters now known as the Maumee, assume a N. E. course; flows in that direction 45 miles, to where it receives almost at the same point, Au Glaize river from the south, and Bean or Tiffen's river from the north. Continuing N. E. 60 miles farther, Maumee is lost on the extreme western angle of lake Erie. This stream, like all others which issue from Ohio into lake Erie, is obstructed by rapids a few miles above its mouth; otherwise it is navigable at high water, into both its main branches. The Au Glaize, which falls into the Maumee at Defiance, is the most considerable branch, not falling much under the St. Mary's and St. Joseph's united. The valley of Maumee, occupying the whole northwestern angle of the state of Ohio, is in length from S. W. to N. E. 100 miles, with a mean breadth of at least 50, area 5,000 square miles, comprising small fractions in Michigan and Indiana. This river and its branches drain

Ohio the counties of Mercer, Allen, Vanwert, Putnam, Hancock, Wood, Henry, Williams, and Paulding. In latitude the valley stretches from 40 degrees 30 minutes to 42 degrees.

Describe Sandusky river.

Sandusky river has its remote sources in Marion, Crawford, and Richland counties, interlocking sources on the W. with those of Blanchard's fork of Au Glaize river, on the S. with those of Scioto; and on the E. with those of White Woman's river, or the N. Wrn. sources of Muskingum. Issuing from this table land the Sandusky assumes a Nrn. course, and after traversing Crawford and Seneca counties, enters Sandusky county, where inflecting to the E. it opens into an oblong sheet of water from one to three miles wide, and about 20 in length. This small gulf is called Sandusky Bay, but closed by two projecting points. On the eastern extreme, the water is confined to a narrow channel, admitting vessels of six or seven feet draught.

Describe Cuyahoga river.

This stream, though comparatively small, is very remarkable in itself, and has gained great importance from having become in part the route of the Ohio and Erie canal. The extreme source of the Cuyahoga is near the Ern. border of Geauga county, interlocking sources with those of Grand river, and within 20 miles from lake Erie, at the mouth of the latter. Flowing thence S. S. W. nearly parallel, though rather inclining from the opposite shore of lake Erie, by comparative courses, 45 miles, traversing Geauge and Portage counties to near the E. border of Medina. Inflecting at more than a right angle upon its former course, the Cuyahoga bending to a little W. of N., is intersected by the Ohio Canal near Northampton in Portage county, over the latter and Cuyahoga county, to its influx into lake Erie at Cleaveland, after an entire com-

parative course of 85 miles. The higher part of the course of Cuyahoga river is on a real table land. The summit level of the Ohio and Erie canal, between the valleys of Tuscarawas and Cuyahoga is 973 feet above tide water in the Atlantic, and 408 feet above lake Erie. The elevation of the canal in the aquaduct eighteen miles above the mouth of Cuyahoga, is 704 feet above the ocean tides, and 139 above lake Erie.

Describe Grand river.

This stream has its extreme source in Trumbull county, about 5 or 6 miles N. W. of Warren, and flowing thence nearly due N. 30 miles, to Ashtabula county, and within 10 miles of lake Erie, bends at right angles to the W., and continues that course 30 miles to the lake, which it enters in Geauga county, between the villages of Fairport and Newmarket, leaving a peninsula of 22 miles in length, and from 10 to 2 miles wide, between the lower course of the river and the lake.

Q. Are there any Rivers or Streams other than those already described ?

A. Chagrin, Ashtabula, and Coneaught, are considerable streams that rise near the lake and fall into it. There are more than one hundred streams not here enumerated, which for seven months in the year, carry a considerable mass of water. A remark applicable to the whole western country applies to this State, that a great number of considerable streams during the winter months disappear before the evaporating ardor of the summer's sun.

Q. Are there any good harbors in this state ?

A. Put-in-Bay, fine harbor of Huron county Ohio. This haven, the most deep and safe in lake Erie, except Detroit, and Niagara rivers, is formed by a curve of the southern Bass Island. The concavity constituting the basin is on the northern side of the island, and directly opposite at about a half a mile distance stretches from E. to W.

the middle Bass; and again, as if nature intended to give complete security to this haven, an islet rises at each opening, affording four passes to and from the bay. Vessels of 12 feet draught can be safely navigated and find good anchorage in Put-in-Bay. Ship channel about 20 miles N. N. W. from the mouth of Sandusky Bay; and 30 S. E. from the mouth of Detroit river.

The other principal harbors on Lake Erie are Sandusky, Maumee Bay, Fair Port, and Ashtabula Creek.

Q. Can you describe the soil and surface of Ohio?

A. As a general character, the soil of Ohio is eminently productive, and the productive part probably nine tenths of the whole, very equally distributed over the state. There is, probably in the whole a body of land, of the same extent of which a greater part is susceptible of improvement and cultivation. It may be considered a surface of Table land, sloping in one direction towards the Ohio, and in the other towards lake Erie. The northern belt has great tracts of wet and marshy soil. They are however excellent, and in positions that render them easy to be drained. They are covered with forests, and when cleared and drained, will not make the least valuable parts of the state. There are extensive bodies of land heavily timbered in a state of nature which are as level as prairies. The most fertile part of the state is between the two Miamies.

On the upper courses of the Miamies, Muskingum and Scioto, are rich and extensive prairies, divided into wet and dry prairies, of which the latter are at present only susceptible of cultivation. The forest trees are the same as in Kentucky and Indiana, except that the peccan tree, which is common on the waters of the Wabash, is not often found here. Grape vines of prodigious size climb the trees, and spread their umbrageous leaves over all the other verdure. Black walnut, black cherry, honey

locust, buck eye, pawpaw, sugar tree, mulberry, elm, ash, hawthorn, coffee tree, and the grand yellow poplar, trees which indicate the richest soil, are every where abundant. Also hickory, maple of various kinds, birch, chestnut, elm, hackberry, sycamore and linden are very numerous.

The forests are deep, but in the richest soils, the trees are rather distinguishable for their straightness, than their size. A considerable part of the eastern and southern divisions is hilly; in some places rising into fine cultivable swells; and in other places into hills too broken and precipitous to admit of cultivation. The most marshy parts are found on the table lands the highest in the state. But as before stated, nine tenths of the surface are susceptible of cultivation, and are already, or are rapidly becoming a thickly settled country of moderate sized freeholds.

One remark may convey a general idea of the forest. It is composed almost entirely of deciduous trees, with few evergreens, or terebinthine trees, if we except some few cypresses. On its whole wide surface is scarcely any land so hilly, sterile, or marshy, as, with moderate labor, may not be subdued, drained, and cultivated,

The whole region seems to have invited a numerous and hardy body of freeholders, to select for themselves, moderate and nearly equal sized farms, and to intersperse them over its surface. In respect to the smallness of the farms, the number, equality, and compactness of the population, not confined, as farther west to the water courses, but diffused over the whole state, it compares very accurately with New England.

To an eye that could contemplate the whole region, from an elevated point, it would even yet exhibit, a great proportion of unbroken forest, only here and there chequered with farms. Yet in the country towns, and better

settled districts, any spectacle that collects the multitude, a training, an ordination, an election, or the commencement of any great public work, causes a rush from the woods and forests, which, like the tenanted trees of the poets in olden time seem to have given birth for the occasion to crowds of men, women, and children, pouring towards the point of attraction. There are vast tracts of country that are actually alluvial, and in fact the greater part has an alluvial aspect, as though it had not long emerged from the waters.

It has been asserted and commonly believed, that springs dry up and fail, as a new country becomes settled. This assertion, however, many of the oldest and most intelligent settlers, resolutely deny and affirm the direct contrary; declaring that the streams in general are more flush in the cleared and settled country, than they were when it was an unbroken forest. In proof, they point out many streams, which then became dry in summer, and now yield sufficient water to turn mills through the season. This is one of the disputable points, which is apt to be settled differently, according to the experience and opinions of its party.

It certainly involves one of the most interesting questions in relation to the influence of cultivation upon climate, a question which ought to have been more elucidated, by the settling of the western country, than any other; but which has hitherto been discussed in a desultory and unsatisfactory manner. Forests are supposed to condense vapors and attract clouds. Clearing them away gives more free scope to the winds, and tends to equalize atmospheric action. Cultivation renders the surface of the soil more compact, and retentive of moisture, and we incline to the opinion, that the western streams are fuller and more lasting, since the cutting down of the forests, and that the Ohio and Mississippi carry more water than

formerly. But the experience of almost every old settler warrants the fact, that innumerable springs have failed since the cutting down of the forests, that shaded the hills whence they sprang. This partial result, may however, be more than counterbalanced by a general change in atmospheric action, consequent upon opening vast surfaces of the forest, to the influence of the sun and air.

Unimproved land has within a few years risen in value almost beyond credibility.

Q. What are the geological features of Ohio ?

A. The hilly portions along the Ohio, contains many primitive rocks, as granite, gneis, and mica slate ; these are generally in loose masses, water worn, and rounded, and abound most in valleys, which appear to have been the beds of rivers. Secondary rocks, as limestone and sandstone from the basis of the soil.

Q. What are the minerals of Ohio ?

A. In the eastern and north-eastern divisions of this state, on the Muskingum, Hockhocking and Scioto, mineral coal abounds, and it has an extensive and rich coal region. It is in the greatest abundance, and of the best quality. It so happens that in the same region are found the greatest bodies of iron ore.

Nature seems to have furnished the industrious people of this state, with every possible facility, for important and staple manufactures. Limestone, marble, and free-stone, in strata, easy to quarry, near the surface, and admirably adapted so building and public works, abound: The useful earths, and fossils are in the richest abundance. Specimens of gypsum are procured from Sandusky bay.

Q. Have the mines of Ohio been extensively wrought, and are the products of a good quality ?

A. Of mines which have yet been worked, Ohio has not much to boast. The free born citizens have found a much

more certain source of wealth, in the abundant productions of the fertile soil. Coal is however obtained in large quantities, and of a good quality. Iron ore is likewise discovered, and wrought extensively in several places; particularly at the falls of Licking river, four miles westerly from Zanesville, on Brush Creek in Adams county and various other places.

Q. Are there any Mineral or Medical Springs in this State?

A. Salt springs are common. In some, the water contains almost as much salt as that of the sea. The most important manufactories of this article, are in Muskingum, Morgan, Jackson, and Gallia counties. Nearly half a million bushels are manufactured in this State. Those springs, whose waters are drunk as medicinal, are most of them more or less impregnated with muriate of soda.

The Yellow Springs, the most accustomed watering place, after Harrodsburg Springs, in the western country, are situated near the Falls of the Miami, 63 miles from Cincinnati, and 18 from Dayton, intermediate between the pretty towns of Xenia and Springfield, and on the height of the table land of the state. The elevated position, the grand and romantic scenery, and the cool and salubrious air, contribute, probably, as much to the restoration of invalids, as the waters, which are, however, strongly charged with iron in solution. The hotel displays a front with a colonade of 200 feet, with a number of beautiful cottages, parallel with the main building.—The clearing is cut out of the solid mass of forest; leaving trees and openings as beauty of scenery and shade require.

From this elevation, and these superb erections of art, the eye sweeps the ancient forests, over Indiana, towards the Ohio and the lakes, arrested only by the horizon.

The Falls of the Little Miami, Pompey's Pillar, the Blue

Hole, and many other romantic spectacles in this region of grand and mountain scenery, impart to this watering place all the charms that the lovers of nature would require; and heighten the contrast of the luxury of the accommodations provided for visitants. Lovers of the picturesque affirm, that neither the Bedford Springs of Pennsylvania, nor the watering places of the mountains of Virginia, surpass this place in grandeur, or equal it in amenity of prospect.

Q. What are the Forest Trees and Natural Productions?

A. The forest of this state is generally deep and heavy. The prevalent kinds of trees are the different species of oak, white, red, black, burr, and overcup; three or four species of ash, white blue, and black; yellow and white poplar; all the different species of elm, hackberry, buckeye, linn, and coffee tree. White maple is common, and sugar maple of great beauty, almost universal. Beach, however, is the most common timber. The undergrowth is spice bush, dog wood, iron wood, horn beam, black haw, pawpaw, different species of thorn, and wild plum.

The yellow poplar is a most splendid tree. It rears into the air a shaft of prodigious height and size. It flowers with gaudy bell shaped cups, and the leaves are of beautiful forms. It is a very useful timber for plank and rails, and all the purposes of building; and splits with great ease.

Dogwood, has a beautiful heart-shaped and crimped leaf, and an umbrella-shaped top. It covers itself in spring with a profusion of brilliant white flowers, and in autumn with berries of a fine scarlet.

The pawpaw is, in our view, the prince of wild fruit-bearing shrubs. The leaves are long, of a rich appearance, and green; considerably resembling the smaller leaves of tobacco. The stem is straight, white, and of

unrivalled beauty. In fact, we have seen no cultivated shrub so ornamental and graceful as the paw-paw. The fruit closely resembles the cucumber, having a more smooth and regular appearance. When ripe, it is of a rich yellow. There are generally from two to five in a cluster. A pawpaw shrub, hanging full of fruit, of a size and weight so disproportioned to the stem, and from under long and rich looking leaves of the same yellow with the ripened fruit, of an African luxuriance of growth, is to us one of the richest spectacles that we have ever contemplated, in the array of the woods. The fruit contains from two to six seeds, like those of the tamarind, except that they are double the size. The pulp of the fruit resembles egg custard, in consistence and appearance. It has the same creamy feeling in the mouth, and unites the taste of eggs, cream, sugar, and spice. It is a natural custard, too luscious for the relish of most people. The fruit is nutritious, and a great resource of the savages.

Q. What is the climate of this State ?

A. Climate here remarkably corresponds to latitude.—elements that operate upon the result are elevations and proximity to waters, or distance from them. The climate, for instance, along the immediate valley of the Ohio, is more equable and temperate than in the middle and table lands of the state; and the difference greater than can be attributed merely to difference of latitude. The central parts of the state are in the same latitude with Philadelphia. The mean temperature of the year at Philadelphia was found to be fifty-three degrees. In the same time the mean temperature of Ohio was fifty-five degrees. As we recede from the Ohio, the temperature diminishes in a greater ratio than that of the latitude.—The prevalent and warm winds are those that blow from

the gulf, and up the valley of the Mississippi. The cold breezes are charged with the cold of Canada, and the Lakes.

In that part of the state that slopes to the south, the snow neither falls deep nor lies long. But in Connecticut Reserve, and in the points that slope towards the lakes they have deep and durable snows; and sleighing and sledding are practicable a considerable length of time. It is a great inconvenience in this climate, that during the winter months the transition from warm to cold, and the reverse, are frequent and violent. Thaws and frosts are the result, and the soil being deep and clayey, the travelling is muddy and uncomfortable. The winters are sometimes considerably severe, and the Ohio has been crossed at Cincinnati on ice for nine weeks. Oftentimes they are mild, and can scarcely be said to be more than a prolongation of autumn, and early opening of spring. Winter seldom commences in severity until Christmas, and its severity is generally mitigated early in February. Vegetation, which is the most certain and accurate thermometer, indicates a temperature of greater mildness in the season, than in the corresponding latitude on the Atlantic.

The heat of the summer in the Ohio valley is uniformly oppressive, but does not commence early, nor continue late in the season. The heat of summer abates as early in the autumn as in the more northern latitudes in the Atlantic country. The autumns are almost universally temperate, dry, and beautiful; and nothing can exceed them for health and pleasantness. No where in the world, is the grand autumnal painting of the forests in the decay of vegetation, seen in more beauty than in the beech forests of Ohio. The richness of the fading colours, and the effect of the mingling hues, baffle all description. A great farming community, like that of Ohio, could scarcely

desire a better climate for themselves, their cattle, and stock of all kinds; as one in which a man can work abroad with comfort a greater number of days in the year.

Q. Can you give a description of the Government of this state?

A. The Constitution of Ohio was adopted in convention at Chillicothe, November 29, 1802; the most important provisions of which are: That the legislative authority of the state shall be vested in a General Assembly, which shall consist of a Senate and House of Representatives, both to be elected by the people. That Representatives shall be chosen annually. That no person shall be a Representative, who shall not have attained the age of 25 years, and be a citizen of the U. S., and an inhabitant of this state; shall also have resided within the limits of the county in which he shall be chosen, one year next preceding his election, unless absent on public business.— That Senators shall be chosen biennially. That no person shall be a Senator who has not arrived at the age of 30 years, and who is not a citizen of the U. S.; shall have resided 2 years in the county or district, immediately preceding his election, unless absent on public business. That no Senator or Representative shall, during the time for which he shall have been elected, be appointed to any civil office under this state, which shall have been created, or the emoluments of which shall have been increased, during such time. That no money shall be drawn from the treasury, but in consequence of appropriations made by law. That the supreme executive power of this state shall be vested in a Governor. That the Governor shall be elected by the qualified electors for the members of the General Assembly, and at the same time and place; holds his office for two years, or until another Governor shall be elected and qualified. Eligible

only six years in any term of eight years. He shall be at least 30 years of age, and have been a citizen of the U. S. 12 years, and an inhabitant of this state 4 years next preceding his election. That no member of Congress, or person holding any office under the U. S. or this state, shall execute the office of Governor. The powers of the Governor of Ohio are nearly the same as generally vested in Governors of states. He can grant pardons, and reprieves after conviction, except in cases of impeachment. That the judicial power of this state, both as to matters of law and equity, shall be vested in a Supreme Court, in courts of Common Pleas for each county; in justices of the peace, and in such other courts as the Legislature may, from time to time, establish. That judges of the Supreme Court shall, by virtue of their offices, be conservators of the peace throughout the state. The presidents of the court of Common Pleas, shall, by virtue of their offices, be conservators of the peace in their respective circuits, and the judges of the Court of Common Pleas shall, by virtue of their offices, be conservators of the peace in their respective counties. The judges of the Supreme Court, the presidents, and the associate judges of the courts of Common Pleas, shall be appointed by a joint ballot of both houses of the General Assembly, and shall hold their offices for the term of 7 years, if so long they behave well. (This mode of choosing judges of law and equity septennially, is a rather novel, or at least wide deviation from the usual manner of election or term of service.) That in all elections, all white male inhabitants, above the age of 21 years, having resided in the state one year next preceding the election, and who have paid, or are charged with, a state or county tax, shall enjoy the right of an elector; but no person shall be entitled to vote, except in the county or district in which he shall actually reside, at the time of the election.

Article 8, contains 28 sections of general principles; among which we may notice the following; there shall be neither slavery nor involuntary servitude in this state, otherwise than for the punishment of crimes, &c. No preference shall be given by law to any religious society, or mode of worship; and no religious test shall be required, as a qualification to any office of trust or profit. *Sec. 6*, secures the freedom of the press, and concludes thus: "In prosecutions for any publication respecting the official conduct of men in a public capacity, or where the matter published is proper for public information, the truth thereof may always be given in evidence; and in all indictments for libels, the jury shall have a right to determine the law and the facts, under the direction of the courts, as in other cases." The person of a debtor, where there is not strong presumption of fraud, shall not be continued in prison after delivering up his estate for the benefit of his creditor, or creditors, in such manner as is prescribed by law. No person shall be liable to be transported out of this state, for any offence committed within the state.

Q. What is the Population of Ohio?

A. The following table is according to the last census; of whites there were

	<i>Male.</i>	<i>Female.</i>
Under 5 years of age,	96,411	89,873
From 5 to 10	74,690	71,851
“ 10 to 15	62,151	59,306
“ 15 to 20	51,138	52,635
“ 20 to 30	81,290	75,574
“ 30 to 40	49,346	43,894
“ 40 to 50	31,112	27,546
“ 50 to 60	18,058	15,898
“ 60 to 70	10,783	8,293
“ 70 to 80	3,632	2,915

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From 80 to 90	935	736
" 90 to 100	138	89
" 100 and upwards,	29	6
Total, - - - -	478,680	447,631

Among the preceding who are deaf and dumb, there are under 14 years of age, 148; from 14 to 25, 160; of 25 and upwards, 118; blind, 232.

Of free colored persons, there were

	<i>Males.</i>	<i>Females.</i>
Under 10 years,	1,562	1,573
" 10 to 24	1,440	1,551
" 24 to 36	808	799
" 36 to 55	646	611
" 55 to 100	325	241
" 100 and upwards,	8	4
Total, - - - -	4,688	4,779

Slaves.

Males, - - - - 1 | Females, - - - - 5
Deaf and Dumb, colored, 9.

RECAPITULATION.

Whites.	Free colored.	Slaves.	Total.
926,311	9,567	6	935,884

Progressive Population.—The settlement of Marietta, 1787, or 49 years ago, commenced that of Ohio. In 1890, the population of the state amounted to 45,365; in 1810, it was 230,760; and in 1820, 581,434.

The population of Ohio is at present increasing with a rapidity unexampled in any other country.

Q. What Indians are to be found in Ohio, and what quantity of land do they claim?

A. The annexed table is taken from Davenport's Gazetteer:

TRIBES.	Number of each tribe.	Number of a- cres claimed by each tribe.
Wyandotts,	542	163,840
Shawnees,	800	117,616
Senecas,	551	55,505
Delawares,	80	5,760
Ottowas,	377	50,581
	<hr/> 2350	<hr/> 393,301

Q. What are the civil divisions of Ohio?

A. For civil purposes, this state is divided into seventy five counties, and these are again subdivided into townships. Their names, date of organization, number of square miles, number of organized townships, seats of justice and bearing distance from Columbus are exhibited in the following.

	When organized.	Sq. Mls.	No. of Townships.	Seats of justice.	Bearing and distances from Columbus.
Adams,	1797	550	10	West Union,	Mls. 101 S.
Allen,	1831	542		Lima,	110 N. W.
Ashtabula,	1811	700	27	Jefferson,	200 " "
Athens,	1805	740	19	Athens,	73 S. E.
Belmont,	1801	536	16	St. Clairsville,	116 E.
Brown,	1818	470	14	Georgetown,	104 S.
Butler,	1803	480	13	Hamilton,	101 S. W.
Carroll, *	1833	*		Carrollton,	125 E. N. E.
Champaign.	1805	417	12	Urbanna,	50 W. N. W.
Clark,	1818	412	10	Springfield,	44 W.
Clermont,	1806	515	12	Batavia,	86 S. W.
Clinton,	1810	500	8	Wilmington,	60 S. W.

Columbiana,	1803	"	"	New Lisbon,	150 E. N. E.
Coshocton.	1811	562	21	Coshocton,	68 N. E.
Crawford,	1826	594	12	Bucyrus,	60 N.
Cuyahoga,	1810	475	19	Cleveland,	140 E. N. E.
Dark,	1817	664	10	Greenville.	93 W.
Delaware,	1808	610	23	Delaware,	24 N.
Fairfield,	1800	540	14	Lancaster,	28 S. E.
Fayette,	1810	435	7	Washington,	38 S. W.
Franklin,	1803	520	18	Columbus,	" "
Gallia,	1803	500	15	Gallipolis,	102 S. S. E.
Geauga,	1805	600	23	Chardon,	157 N. E.
Greene,	1803	400	8	Xenia,	56 W. S. W.
Guernsey,	1810	621	19	Cambridge,	76 E.
Hamilton,	1790	400	14	Cincinnati,	110 S. W.
Hancock,	1828	576	5	Findlay,	90 N. N. W.
Hardin,	1833	570	"	Kenton,	70 " " "
Harrison,	1813	"	13	Cadiz,	124 E. N. E.
Henry,	"	744	2	Napoleon,	161 N. W.
Highland,	1805	555	11	Hillborough,	62 S. S. W.
Hocking,	1818	432	0	Logan,	46 S. S. E.
Holmes,	1825	422	14	Millersburg,	81 N. E.
Huron,	1815	800	29	Norwalk,	106 N.
Jackson,	1816	490	13	Jackson,	13 S. S. E.
Jefferson,	1797	400	13	Steubenville,	147 E. N. E.
Knox,	1808	618	24	Mt. Vernon,	47 N. N. E.
Lawrence,	1817	430	12	Burlington,	130 S. S. E.
Licking,	1808	666	25	Newark,	33 E. N. E.
Logan,	1818	425	9	Bellefontaine,	50 N. W.
Lorain,	1824	580	19	Elyria,	130 N. N. E.
Lucas, †	1835	"	"	Tolido,	150 N. N. W.
Madison,	1810	480	10	London,	25 W. S. W.
Marion,	1824	527	15	Marion,	45 N.
Medina,	1818	475	14	Medina,	110 N. N. E.
Meigs,	1819	400	12	Chester,	94 S. S. E.
Mercer,	1824	576	4	St. Mary's,	111 N. W.
Miami,	1807	410	12	Troy,	68 N. by W.
Monroe,	1815	563	18	Woodsfield,	120 E. S. E.
Nontgomery,	1803	480	12	Dayton,	68 W.
				McConnells-	
Morgan,	1819	500	15	ville,	75 S. E.
Muskingum,	1804	665	23	Zanesville,	52 E.
Paulding	"	432	3	" "	170 N. W.
Perry,	1818	402	12	Somerset,	46 E. S. E.
Pickaway	1810	470	14	Circleville,	26 S.
Pike,	1815	421	9	Piketon,	64 "

Portage,	1807	750	30	Ravenna,	135 N. E.
Preble,	1808	432	12	Eaton,	50 W.
Putnam	"	576	2	" "	148 N. W.
Richland,	1813	900	25	Mansfield,	74 N. N. E.
Ross,	1798	615	16	Chillicothe,	45 S.
Sandusky,	1820	600	10	Lo. Sandusky	105 N.
Scioto,	1803	700	14	Portsmouth,	90 S.
Seneca,	1824	540	11	Tiffin,	87 N.
Shelby,	1819	418	10	Sidney,	70 N. W.
Stark,	1809	"	16	Canton,	116 N. E.
Trumbull,	1800	875	34	Warren,	160 N. E.
Tuscarawas,	1808	"	19	New Phila.	100 E. N. E.
Union,	1824	450	9	Marysville,	30 N. W.
Vanwert,	"	432	"	" "	100 " "
Warren,	1803	400	9	Lebanon,	80 S. W.
Washington,	1788	713	19	Marietta,	106 S. E.
Wayne,	1812	660	20	Wooster,	89 N. E.
Williams,	1824	600	10	Defiance,	130 N. W.
Wood,	1820	750	7	Perrysburg,	135 " "

* Carroll county has been formed from Columbiana, Harrison, Stark and Tuscarawas, since the edition of the Ohio gazeteer 1833 was published, from which the foregoing was constructed. Hence the townships in each are not given.

† Lucas county has been recently formed from parts taken from Sandusky and Wood counties, and from the disputed country claimed by Michigan.

|| Paulding, Putnam and Vanwert counties had not been organized at the period of our information.

Q. Can you now describe, or give a tabular view of the acres of land, total amount of taxable property, during the year 1833?

A. The following is as correct a statement of the statistics you require as can be procured. It is taken from PECK'S GUIDE for emigrants. It should be noted that in all the western states, lands purchased of the government of the United States, are exempted from taxation for five years after sale.

It is supposed, such lands are not included in the table. You will bear in mind that great changes have taken place in the population since the last census.

COUNTIES.	Population in 1830.	Acres of land.	Total amount of taxable property.
Adams,	12,231	234,322	\$832,565
Allen,	578	14,159	51,214
Ashtabula,	14,584	449,742	1,347,900
Athens,	9,787	365,348	481,479
Belmont,	28,627	301,511	1,591,716
Brown,	17,867	267,130	1,358,944
Butler,	27,142	257,989	2,514,007
Carroll,	- - -	185,942	529,575
Champaign,	12,131	233,493	908,571
Clark,	13,114	247,083	1,114,995
Clermont,	20,466	280,679	1,542,627
Clinton,	11,436	239,404	785,770
Columbiana,	35,592	317,796	1,491,099
Coshocton,	11,161	246,123	850,708
Crawford,	4,791	79,582	217,675
Cuyahoga,	10,373	292,252	1,401,591
Dark,	6,204	107,730	260,259
Delaware,	11,504	338,856	831,093
Fairfield,	24,786	308,163	1,992,697
Fayette,	8,132	234,432	544,539
Franklin,	14,741	325,155	1,663,315
Gallia,	9,733	205,727	427,962
Geauga,	15,883	381,380	1,427,869
Greene,	14,801	251,512	1,441,907
Guernsey,	18,036	275,652	908,109
Hamilton,	52,317	239,122	7,726,091
Hancock,	813	9,302	50,929
Hardin,	210	195,607	118,425
Harrison,	20,916	28,412	1,023,210
Highland,	16,345	317,079	1,065,863
Hocking,	4,008	92,332	215,272
Holmes,	9,135	182,439	556,060
Huron,	13,346	504,639	1,512,655

Jackson,	5,941	57,874	8197,932
Jefferson,	22,489	230,145	1,855,064
Knox,	17,085	313,823	1,252,294
Lawrence,	5,397	56,862	241,782
Licking,	20,869	393,205	2,101,495
Logan,	6,440	203,509	519,622
Lorain,	5,696	360,863	889,552
Madison,	6,190	256,421	600,578
Marion,	6,551	168,164	390,602
Medina,	7,560	296,257	931,599
Meigs,	6,158	229,004	380,172
Mercer,	1,110	12,688	54,118
Miami,	12,807	240,093	1,000,748
Monroe,	8,768	95,520	280,572
Montgomery,	24,362	267,349	2,293,419
Morgan,	11,800	169,135	452,991
Muskingum,	29,334	366,609	2,362,616
Perry,	13,970	175,123	729,241
Pickaway,	16,001	300,969	1,798,665
Pike,	6,024	129,153	521,109
Portage,	18,826	472,156	2,019,029
Preble,	16,291	246,678	1,086,322
Richland,	24,008	433,620	1,354,169
Ross,	24,068	328,035	2,897,605
Sandusky,	2,851	95,822	275,992
Scioto,	8,740	105,539	963,882
Seneca,	6,159	108,758	302,089
Stark,	26,583	374,101	1,854,967
Shelby,	3,671	66,863	194,468
Trumbull,	26,123	556,011	1,807,792
Tuscarawas,	14,298	237,337	902,778
Union,	3,192	259,101	380,535
Warren,	21,463	248,517	2,143,065
Washington,	11,731	282,498	681,301
Wayne,	23,333	382,254	
Williams, and others, not organized,	1,089	17,797	1,451,996 90,066
Wood,	1,102	16,981	127,862
Total,	935,884	25,600,000	75,939,859

Q. Can you give the boundaries of Adams county?

A. Adams, county is bounded by Brown county W.; Highland N. W., Pike N. E., Sott E., and by the Ohio river separating it from Lewis and Mason counties of Kentucky S. Length 23 miles, breadth 22. It is divided into the following townships: Franklin, Meigs, Jefferson, Green, Tiffin, Monroe, Sprigg, Liberty, Wayne, and Scott. The general slope of this county is to the southward and towards the Ohio river; it is hilly but fertile. Chief town West Union.

Q. Give the boundaries &c, of Allen county?

A. Allen county is bounded W. by Mercer, and Vanwert N. by Putnam, E. by Hardin, and S. by Logan and Shelby. It extends about 23 miles from N. to S., with a width of 22 miles from E. to W.

Q. What are the boundaries &c. of Ashtabula county?

A. Ashtabula is bounded N. E. by Erie county Pennsylvania, E. by Crawford county Pennsylvania, S. by Trumbull county Ohio, W. by Geauga, and N. by Lake Erie. Greatest length along Pennsylvania 32 miles, on the western border the length is about 26 miles, mean length 29, and breadth 28. It is divided into the following townships: Andover, Ashtabula, Austinburg, Cherryvalley, Colebrook, Denmark, Geneva, Harpersfield, Hartsgrove, Jefferson, Kingsville, Lenox, Millsford, Monroe, Morgan, New Syme, Orwell, Pierpont, Richmond, Rome, Salem, Saybrook, Trumbull, Wayne, Williamsfield, and Windsor.

The southeastern angle of this county slopes, to the S. E. and gives source to the Shenango and other branches of Big Beaver. The western and central sections have a N. western declivity, and are drained by the sources of Grand river of Lake Erie, while the N. eastern part slopes N. wardly, and is watered by Connaeut and Ashtabula rivers. From the preceding elements, we find this coun-

ty occupying a part of the table land between the vallies of Erie and Ohio. Chief town Jefferson.

Q. What are the boundaries, &c. of Athens county?

A. Athens, county is bounded S. by Meigs, S. W. by Galia and Jackson, W. by Hocking, N. W. by Perry, N. E. by Morgan, E. by Washington, and S. E. by Ohio river separating it from Wood county of Virginia. The Longest line that can be drawn over this irregularly formed county is diagonal from S. W. to N. E. 40 miles. Mean breadth 20 miles. It is divided into the following townships: Alexander, Ames, Athens, Berne, Canaan, Carthage, Dover, Elk, Homer, Lee, Lodi, Rome, Trimble, Troy, Vinton, Waterloo, and York.

The southern margin of this county declines to the southward and gives source to some creek flowing in that direction into Ohio river. The central and rather most extensive section is watered by the Hocking river and its confluent. The Hocking enters at the extreme north-western angle, and flowing to the S. E. diagonally over the county falls into the Ohio river at the extreme south-western angle. The surface of Athens county of Ohio is excessively hilly, but fertile. Chief town Athens.

Q. What are the boundaries, &c. of Belmont county?

A. Belmont county is bounded S. by Monroe, W. by Guernsey, N. W. by Harrison, N. E. by Jefferson, and E. by Ohio river separating it from Ohio county Virginia. Greatest length along the northern border, 30 miles the breadth 20, and mean length 26, the area 520 square miles. It is divided into the following townships: Colerain, Flushing, Goshen, Kirkwood, Mead, Pease, Pultney, Richland, Smith, Somerset, Union, Warren, Wayne, Wheeland York.

This county is divided into two very nearly equal sections, by the divided table land between the vallies of Ohio and Muskingum, from which flow eastward small

creeks into Ohio river and issue westward the sources of Will's and Stillwater branches of Muskingum. The surface is a series of hills, with deep and narrow intervening vallies. Soil almost uniformly fertile. Chief town St. Clairsville.

Q. What are the boundaries &c. of Brown county ?

A. Brown county is bounded by Ohio river separating it from Mason and Bracken counties of Kentucky S. by Clermont county Ohio W., Clinton N. W., Highland N. and N. E., and Adams E. Length from S. to N. 30, miles, mean breadth 17. It is divided into the following townships: Byrd, Clark, Eagle, Franklin, Huntington, Jackson, Lewis, Perry, Pike, Pleasant, Scott, Sterling, Union, and Washington.

The N. western part between Clermont and Highland counties slopes to the S. E. and is drained by the E. Fork of Little Miami. The southern and larger section declines towards Ohio river and is drained by White Oak and several smaller creeks. The surface of the whole county is broken, but soil excellent. Chief town Georgetown.

Q. What are the boundaries, &c. of Butler county?

A. Butler, a western county, bounded on the N. by Preble, and Montgomery counties, E. by Warren county, S. by Hamilton county, and W. by the state of Indiana. It is 27 miles long from E. to W., by 18 broad from N. to S. containing, It is divided into the following townships: Fairfield, Hanover, Lemon, Liberty, Madison, Milford, Morgan, Oxford, Reiley, Ross, St Clair, Union, and Wayne. It contains also, the towns of Hamilton, the county seat, Jacksonburg, Middletown, Trenton, Millville, Monroe, Chester Oxford, and Princeton. The land is mostly of an excellent quality for farming. Its waters are the Great Miami, Dicks, Indian, St. Clair, Four mile, and Seven mile creeks. Hamilton is the county town.

Q. What are the boundaries, &c. of Carroll county?

A. Carroll, is a new county of Ohio, formed in the year 1833, and taken from Stark, Columbiana, Jefferson, Harrison and Tuscarawas counties, and bounded on all sides by them.

Q. What are the boundaries, &c. of Champaign county?

A. Champaign county is bounded by Clarke S., Miami S. W., Shelby N. W., Logan N., Union N. E., and Madison S. E., Length 29 miles, breadth 16.

Though the extreme sources of Darby's creek a branch of Scioto river flows from the eastern border, and some fountains of creeks flowing into the Great Miami, issue from the westward, the great body of this county slopes S. ward and is included in the valley of Mad river. Chief town Urbana.

Q. What are the boundaries, &c. of Clark county?

A. Clark county, is bounded by Champaign N., Madison E., Greene S., and S. W. and N. W. by Montgomery and Miami. Length 30 miles, breadth 18, area 412 square miles. It is divided into the following townships: Pleasant, Harmony, Madison, Greene, Mad river, Springfield, and Moorefield on the E. side of Mad river, and German, Bethel and Pike on the W. County seat is Springfield. The soil is generally rich and fertile. This county was organized in March 1818, out of the counties of Champaign and Greene.

Q. What are the boundaries, &c. of Clermont county?

A. Clermont, a river county, bounded on the N. by Warren county, on the E. by Brown county, on the S. by the Ohio river, and on the W. by Hamilton county. It is 30 miles long from N. to S. and 15 broad from E, to west.

A large portion of the land in this county is rich and

fertile, although some parts of it are wet and unfit for cultivation. Seat of justice is Batavia. The principal water is a stream running westwardly into the Little Miami river called E. Fork. The land is broken and hilly on the banks of the Ohio river, and the smaller streams emptying into it. Farther back, much of the land is wet and marshy. It is divided into the following townships: Batavia, Franklin, Goshen, Miami, Ohio, Stonelick, Tate, Union, Washington, Wayne, and Williamsburg.

Q. What are the boundaries, &c. of Clinton county?

A. Clinton county is bounded S. E. by Highland, S. W. by Brown, W. by Warren, N. by Green, and N. E. by Fayette. Length 22 miles, mean breadth 18.

This county is a real table land, from which creeks flow literally in every direction. On its surface are the sources of Paint creek branch of Scioto, and of E. Fork, Todd's Fork, and other branches of Little Miami. The soil is generally productive. Chief town Wilmington.

The portion of this county that is so broken as to injure the cultivation, is so small as not to be worth mentioning. The southwest quarter is the poorest land in the county, and has the most marshy ground. The E. end comes in next for flat lands, although it is but a small portion that is too wet for ploughing, and that is excellent meadow land. There are two prairies on Anderson's Fork containing about 1,200 or 1,500 acres. This seems to be all the prairie worth mentioning. This county is generally very heavy timbered; among which timber are various kinds, such as white, black, red and bur oak; white, blue, and black ash; yellow and white poplar; black and white walnut; hickory; red and white elm; hackberry; buckeye &c. Nearly the whole county is supplied with sugar trees

Clinton county was first settled in 1804—5, principally

by some friends or quakers from North Carolina, Tennessee and Virginia, and by a few Kentuckians.

Q. What are the boundaries, &c. of Columbiana county?

A. Columbiana county, is bounded on the N. by Trumbull, county, on the west by Stark county, on the south by Harrison and Jefferson counties, and Ohio river; and on the E, by Beaver county Pennsylvania. It is a large, fertile and wealthy county, lying in a square form of 30 miles each way, excepting an area of about 36 square miles, which is cut off from the southeastern corner by a bend in the Ohio river. It contained 22,038 inhabitants in 1820; and in 1827, 5,399 electors. It is divided into the 24 following townships: St. Clair, Middleton, Unity, Springfield, Beaver, Fairfield, Elkrum, Madison, Yellow creek, Saline, Wayne, Centre, Salem, Green, Goshen, Butler, Hanover, Franklin, Fox, Washington, Augusta, West, Knox, and Smith. In various parts are also laid out the 16 following towns or villages, namely, New-Lisbon, the seat of justice, Columbiana, Bellefonte, Clarkson, Portsmouth, Pottsgrove, Salem, Fairfield, Petersburg, West-Union, New-Garden Achoistown, Hanover, Fawcettstown, Wellsville, and New Alexandria. Little Beaver Creek, together with its various branches, waters above half the eastern parts of the county.

The land is mostly hilly, or rolling: considerable quantities, however, are level. It contains inexhaustible beds of iron ore, and stone coal, of the easiest access. Upon Yellow creek, one of its waters, salt is manufactured, in very considerable quantities. The water, is obtained from wells sunk only from 150, to 200 feet. It has also, several paper manufactures, oil mills, and breweries.

Columbiana, a small post town of Fairfield township, in the above described county 8 miles northerly from

New Lisbon, and 160 miles northeast from Columbus, the Capitol of the state.

Q. What are the boundaries, &c. of Coshockton county?

A. Coshockton is an interior county, bounded on the north by Holmes, on the east by Tuscarawas, south by Muskingum, and on the west by Knox county. It is 30 by 20 miles in extent. It is divided into the 20 following townships: Bedford, Bethlehem, Clark, Crawford, Franklin, Jackson, Jefferson, Keene, Linton Mill creek, Monroe, Newcastle, Oxford, Perry, Pike, Tiverton Tuscarawas, Virginia, Washington, Whiteeyes. Its principal waters, besides the Muskingum river, which runs through the S. eastern quarter, are Wills-creek, and White Womans river, together with its extensive branches. The land is generally hilly, and rough. although in some places, level and fertile.

The Ohio and Erie canal runs centrally across this county, which gives additional value to its mineral and agricultural productions. This county was formerly occupied by indians of the Delaware tribe, who had villages on the present site of Coshockton, of Caldersburg, and two miles S. of the former place. Coshockton was the scene of a massacre by general Broadhead, in 17—. Mounds and burial places are common throughout the county.

Q. What are the boundaries, &c. of Crawford county?

A. Crawford county is bounded by Marion S., Hardin southwest, Hancock northwest, Seneca north, Huron N. east, and Richland east. Length from east to west 32 miles, mean breadth 20.

This county is nearly commensurate with the higher part of the valley of Sandusky river, and is drained N. by the various constituents of that stream. The surface is level, and is a rather elevated table land. Chief town Bucyrus.

This county is divided into 12 following townships, viz : Antrim, Bucyrus, Chatfield, Cranberry, Crawford, Holmes, Liberty, Pitt, Sandusky, Sycamore, Tyamochty, and Whetstone. There is an indian reservation of about 12 by 19 miles in extent in the central part of the county. It was named in remembrance of an American officer, who was most barbarously burnt to death by the indians on one of its plains.

Q. What are the boundaries, &c. of Cuyahoga county ?

A. Cuyahoga is bounded by Geauga county northeast, Portage southeast, Medina southwest, Lorain west, and lake Erie north. Length from east to west 32 miles, mean breadth 17.

The surface of this county is a rather rapidly inclining plain, the farms have a fall of at least 400 feet from the southern and higher, to the lower border on lake Erie. Chief town, Cleveland.

It is divided into the 19 following townships : Bedford, Bricksville, Brooklyn, Chagrine, Cleaveland, Dover, Euclid, Independence, Mayfield, Middleburg, Newburg, Olmstead, Orange, Parma, Rockport, Royalton, Solon, Strongsville and Warrensville. The principal waters are the Chagrine, Cuyahoga, and Rock rivers, all running northwardly into lake Erie. Of these the Cuyahoga is the largest, and gives name to the county.

Q. What are the boundaries, &c. of Darke county ?

A. Darke county is bounded N. by Mercer, N. east by Shelby, S. E. by Miami and Montgomery, S. E. by Wayne county Indiana, and W. by Randolph county Indiana. Extending in latitude from 39 degrees 52 seconds to 40 degrees 27 seconds, and in longitude 7 degrees 26 to 7 degrees 48 west, Washington City. Breadth 21 miles from E. to West, and mean length 36. Darke county is nearly commensurate with the region drained by, and giving source to the higher branches of the West Fork of Great

Miami, with a general S. E. slope. Surface pleasantly diversified by hill and dale, soil in part productive. It is divided into the following townships: Adams, Butler, German, Greenville, Harrison, Neave, Richland, Twin, Washington and Wayne. There is considerable prairie land in the county. Greenville the seat of justice is the only town of considerable note in the county. Its principal streams are Stillwater and Greenville creeks, which are the head waters of the southwest branch of Great Miami river,

Q. What are the boundaries, &c. of Delaware county?

A. Delaware county is bounded S. by Franklin, W. by Union, N. by Marion, N. E. by Knox, and S. E. by Licking. Greatest Length 28 miles, mean breadth 25. The E. border of this county extends from S. to N. along the summit between the valleys of Muskingum and Hocking on the E., and the Scioto on the west. The extreme sources of White Woman's Fork, of Muskingum and of the Hocking rise along the east border of Delaware and flow eastwardly. The body of the county has a slope almost due south, and is traversed in that direction, by the two main constituent streams of Scioto, the Whetstone and Scioto Proper; Allum and Walnut creeks, also tributary waters of Scioto rise in its eastern section. Chief town Delaware. Population 1820, was 7,639. It is divided into 23 townships, viz: Bennington, Berkshire, Berlin, Brown, Concord, Delaware, Genoa, Herlem, Harmony, Kingston, Liberty, Lincoln, Marlborough, Orange, Oxford, Peru, Porter, Radnor, Scioto, Sunbury, Thompson, Troy, and Westfield.

Q. What are the boundaries, &c. of Fairfield county?

A. Fairfield, a large, wealthy, interior county, is bounded on the north by Licking, east by Perry, south by Hocking, and west by Pickaway and Franklin counties. It is 30 miles long by 24 broad; and contains 540 square mls. It is divided into the 14 following townships viz: Aman-

da, Liberty, Madison, Bern, Bloom, Hocking, Violet, Greenfield, Clear-creek, Pleasant, Walnut, Richland, Rush-creek, and Perry. The villages regularly laid out and called towns, are in addition to Lancaster, the county seat, the eight following namely: Rushville, Pickerington, Greencastle, Lithopolis, Baltimore, Carroll, Basil and Monticello. This county embraces perhaps, the most elevated tract of country, of similar extent, between the Muskingum and Scioto rivers. The land is therefore, drier and more peculiarly adapted to the production of wheat, and other kinds of grain, than that of several adjacent counties. The principal streams are the head waters of Hockhocking river. The face of the country about Lancaster in the central part of the county presents a peculiar aspect.—The land seems generally level; abrupt, precipitous, and uniform piles of rocks, producing very little timber or herbage, are occasionally interspersed in a promiscuous manner, in every direction.

They are of divers altitudes and magnitudes, some might perhaps, conjecture them to have been works of art, did not their numbers, and magnitude preclude the idea.

One of those called Mount-Pleasant, about one mile northeasterly from Lancaster, is very remarkable. It is "situated near a large prairie, and is encompassed by a large plain. The southwest front of this large pile of rocks is about 211 feet in perpendicular height: the base is about a mile and a half in circumference, while the top is about 30 by 100 yards across, the northeast side is tolerably easy of ascent, and it can be ascended in one or two other directions, but those who ascend it find it tiresome, and are glad when they reach the summit, which is level and commands a very extensive prospect of the surrounding country, which it may be truly said is magnificently sublime. On approaching Lancaster, across a,

prairie, the bold front and great height of Mount-Pleasant has a romantic appearance, and forms a pleasing contrast with the surrounding country. From this mount the town is supplied with its stone and sand." The soil in this vicinity is rather hard of tillage, but tolerably good for grain. Some parts of the county, particularly in the S. eastern quarter, are very hilly, and a thin barren soil: but all taken together, may be considered valuable.

The internal improvements are considerable, there being within the limits of the county, three fulling mills, 8 carding machines, and 30 gristmills, beside double that number of sawmills.

Q. What are the boundaries, &c. of Fayette county?

A. Fayette, is an interior county, bounded on the N. by Madison, E. by Pickaway, and Ross, S. by Highland, west by Clinton and Green counties.

It is 23 by 21 miles in extent. The principal waters are Deer and Paint creeks. The land is generally level and of a moderately good quality. County seat Washington. It is divided into 7 townships, namely: Paint, Madison, Union, Wayne, Green, and Concord. It has the four post offices of Washington, Bloomingburg, Duffs fork, and Main Paint creek.

The settlement of this county commenced about the year 1805. It was so named in honor of the Marquis de Lafayette, whose devotedness to the cause of American liberty in our revolutionary contest, was, and still is warmly cherished by all American citizens.

What are the boundaries, &c. of Franklin county?

A. Franklin county, is bounded south by Pickaway, southwest and West, by Madison, northwest by Union, north by Delaware, northeast by Licking, and southeast by Fairfield. Length 25 miles, mean breadth 22. The slope is directly southward, and in that direction the county is traversed by Whetstone and Scioto rivers, which

entering on the northern border, and uniting between Franklin, and Columbus, the combined waters, assuming the name of Scioto, continue south over the residue of the county. The eastern side is also traversed in a southern course by Big Walnut; as is the western by Darby creek. The soil is productive. But the main body of the land is more peculiarly fitted for grazing, than for raising grain. It is divided into the following townships: Blendon, Brown, Clinton, Franklin, Hamilton, Jackson, Jefferson, Madison, Mifflin, Montgomery, Norwich, Perry, Plain, Pleasant, Prairie, Sharon, Truro, and Washington. In point of extent of territory, number of townships, amount of taxable property, of taxes annually paid; in population, and general progressive annual increase, Franklin county may be considered a fair sample of the average of all the counties of the state.

Q. What are the boundaries &c. of Gallia county?

A. Gallia county is bounded N. by Athens and Meigs counties, E. by the Ohio river, S. and W. by Lawrence and Jackson counties. Its greatest extent is 36 miles from north to south, and 24 from east to west; containing about 500 square miles. The land in the interior, southern and western parts, is hilly, of a poor soil, and consequently not much settled; but in the upper parts, and bordering on the Ohio river, are numerous tracts of fertile and valuable land. The principal water is Raccoon creek, with several smaller ones, all running southwardly into the Ohio river, which skirts the whole length of the county, from the northeastern, to its southwestern most extremity. The name is derived from the circumstance of some of its earliest settlements having been made by emigrants from France anciently called Gaul, or Gallia. It is divided into the following townships: Addison, Cheshire, Galliopolis, Green, Greenfield, Guyan,

Harrison, Huntington, Morgan, Ohio, Perry Raccoon, Springfield, Walnut, and Wilksville.

Q. What are the boundaries, &c. of Geauga county?

A. Geauga, a lake county, is bounded on the north by Erie, east by Ashtabula and Trumbull counties, S. by Portage, and on the west by Cuyahoga county. It is 35 miles long, and 20 broad, containing about 600 square miles. The name is said to signify in an indian dialect, Grand, which is the name of the principal river. Beside that river, some of the sources of Chagrine and Cuyahoga rivers water this county. In 1820 it contained 7,777 inhabitants. It is divided into the following townships: Madison, Thompson, Montville, Huntsburg, Batavia, Parkman, Welchfield, Burton, Claridon, Hambden, Leroy, Perry, Painsville, Concord, Chardon, Munson, Newbury, Auburn, Bainbridge, Russel, Chester, Kirtland, and Mentor.

Q. What are the boundaries, &c. of Greene county?

A. Greene county is bounded S. E. by Clinton, S. W. by Warren, W. by Montgomery, N. by Clarke, N. E. by Madison, and E. by Fayette. Length, 28 miles, mean breadth, 18. Extending in latitude from 39 deg. 30 min. to 39 deg. 51 min., and in long. from 6 deg. 33 min. to 7 deg. 8 min W, Washington City, This county is drained by some of the higher branches of Little Miami. Slopes S. westward. Chief town Xenia.

It is divided into the following townships: Bath, Beaver creek, Sugar creek, Silver creek, Ross, Miami, Cesar's creek, and Xenia. It also contains the 5 villages or towns of Xenia, Fairfield, Bellbrook, Jamestown, and Winchester. This county abounds with springs of excellent water, and is considered generally healthy.

Q. What are the boundaries &c. of Guernsey county

A. Guernsey county is bounded S. E. by Monroe, by Morgan southwest, Muskingum west, Coshocton north-

west, Tuscarawas north, Harrison northeast, and Belmont east. Length from south to north, 28 miles; mean breadth 25.

Extending in latitude from 39 degrees 51 minutes to 40 degrees 12 minutes; and in longitude from 4 degrees 13 minutes to 4 degrees 43 minutes west Washington City. It is almost commensurate with the higher valley of Wills' creek; slope northwardly in the general course of that stream; surface hilly, with good soil. It is divided into the following townships: Adams, Beaver, Buffalo, Cambridge, Centre, Jackson, Jefferson, Knox Liberty, Londonderry, Madison, Monroe, Oxford, Richland, Spencer, Washington Westland, Wheeling, and Wills. The towns are Cambridge, the seat of justice, Washington, Frankfort, Fairview, Winchester Londonderry and Liverpool. The land is generally hilly, and of a moderately good quality; there are however, several tracts of excellent land along Wills creek; which stream and its branches compose its principal waters. There are excellent localities for the raising of the grape, and of sheep, both of which are going through a course of experiment, which if the result should equal the expectations of good judges, the county of Guernsey may yet be as famous for excellence of its wine, and the fineness of its fleeces as any country in Europe.

Q. What are the boundaries, &c. of Hamilton county?

A. Hamilton county is bounded west by Dearborn county, Indiana, north by Butler county, Ohio, northeast by Warren, east by Clermont, southeast by the Ohio river separating it from Campbell county, Ky., and southwest by Ohio river, separating it from Boone county, Kentucky. Length from east to west, 30 miles, mean breadth, 16. This county occupies a part of that great buttress of hills, which skirt the right bank of Ohio river from its head near Pittsburg, to below the influx of Wabash. Great and

Little Miami traverse Hamilton in deep valleys. The surface of the county is hilly, but the soil in an especial manner productive. Bituminous mineral coal abounds. The Miami canal, connecting the stream of the Great Miami with the Ohio, reaches the latter in Cincinnati. In 1830, this county exclusive of the city of Cincinnati, contained a population of 22,317, including the inhabitants of that city, 52,317, or with the city a distributive population of 109 to the square mile. Its townships are as follow: Anderson, Cincinnati, Colerain, Columbia, Crosby, Delhi, Fulton, Greene, Miami, Mill Creek, Sycamore, Symmes, Springfield, Whitewater.

Q. What are the boundaries, &c. of Hancock county?

A. Hancock, a county situated in the new purchase, bounded north by Wood, east by Seneca and Crawford, south by Hardin, and west by Putnam county. It is 24 miles square, containing 576 square miles. The town of Findlay is the seat of justice. It is divided into the five townships of Amanda, Delaware, Findlay, Jackson, and Oldtown.

Q. What are the boundaries, &c. of Hardin county?

A. Hardin county is bounded by Union southeast, Logan south, Allen west, Hancock north, Crawford northeast, and Marion east. It is very nearly a square of 24 miles each way. This county occupies a table land from which the branches of Sandusky and those of Blanchard's river flow to the north; the extreme sources of Scioto southeast, those of Sandy creek branch of Great Miami southwest, and those of Au Glaize river west. Chief town Hardy.

Q. What are the boundaries, &c. of Harrison county?

A. Harrison county is bounded southeast by Belmont; southwest by Guernsey; west by Tuscarawas; northwest by Stark; north by Columbiana; and east by Jefferson. Length from south to north, 27 miles, mean breadth 18.—

It is divided into the following townships: Archer, Athens, Cadiz, Freeport, German, Green, Moorfield, North, Nottingham, Rock, Rumley, Short creek, Stock, Union, and Wabash.

The dividing ridge between the valleys of Ohio and Tuscarawas rivers extends from south to north the entire length of this county, dividing it into two unequal sections. The eastern side slopes to the east, and gives source to creeks flowing over Jefferson into Ohio river. The western side declines westward, towards the Tuscarawas; surface excessively broken and hilly, but soil highly fertile.

Q. What are the boundaries, &c. of Henry county?

A. Henry county is bounded east by Wood, south by Putnam, southwest by Paulding, west by Williams, and north by Lenawe county, Michigan.

This county lies entirely in the valley of Great Miamia, and is traversed by the main volume of that river flowing northeastward, and dividing the county into two not very unequal sections. Chief town, Damascus.

Q. What are the boundaries, &c. of Highland county?

A. Highland county is bounded E. by Adams county, southwest and west by Brown, northwest by Clinton, S. by Fayette, northeast by Ross, and east by Pike. This county derives its name from occupying a table land between the Ohio, Scioto, and Little Miami valleys. The southeastern sources of Paint creek flow to the northeast towards the Scioto; those of Brush and Eagle creeks southward towards Ohio river, and the eastern branches of Little Miami westward. The surface is hilly and broken. Soil various, but generally productive. Chief town, Hillsboro'.

The county is divided into the following townships:—Brush creek, Concord, Fairfield, Jackson, Liberty, Madison, New Market, Paint, Salem, Union, and White oak.

Q. What are the boundaries, &c. of Hocking county?

A. Hocking is an entire county bounded on the north by Fairfield and Perry, east by Athens, south by Jackson, and west by Ross counties. It is 26 by 24 miles in extent, containing 432 square miles. The land is generally hilly and broken. It contains, however, considerable fertile and valuable land, particularly along the borders of Hocking river, which runs across the northeastern quarter of the county. The head waters of Raccoon and Salt creeks are also in this county.

It is divided into the nine townships of Eagle, Falls Good Hope, Green, Laurel, Salt Creek, Star, Swan, and Washington.

Q. What are the boundaries, &c. of Holmes county?

A. Holmes county is bounded east by Tuscarawas, south by Coshocton, southwest by Knox, northwest by Richland, and north by Wayne. Length from east to west 30 miles, breadth 18.

Latitude 40 degrees 27 minutes to 40 degrees 40 minutes, longitude 4 degrees 42 minutes to 5 degrees 13 minutes west Washington City. This county is traversed from north to south by Kilbuck branch of White Woman's river and the western border by Mohiccon river, slope southward. Chief town Millersburg. Holmes county was formed since the census of 1820, from the southern part of Wayne, and northern of Coshocton. The soil is of various qualities both poor and rich.

Q. What are the boundaries, &c. of Huron county?

A. Huron county is bounded east by Lorain county, S. by Highland, southwest by Crawford, west by Seneca and Sandusky, and north by lake Erie. Greatest length from south to north along the western border 48 miles; mean length is about 40, breadth 28. Latitude 40 deg. to 40 deg. 33 minutes, longitude 5 degrees 18 minutes to

5 degrees 48 minutes west Washington City. Vermillion river of Erie flows northwardly along its eastern border Sandusky river after a northern course over Marion, Crawford, Seneca and Sandusky counties, inflects to the east widens into a bay, the lower part of which traverses Huron county and separates Sandusky point from the other parts of the county; Huron river however, from which the county takes its name, drains the much greater part of its surface. The whole area is an inclined plain falling by gentle slopes northward towards lake Erie. The soil is generally fertile. Chief town Sandusky, though Norwalk is the seat of justice. It is divided into following townships: Brunson, Clarksfield, Danbury, Eldridge, Fairfield, Fitchville, Florence, Greenfield, Greenwich, Hartland, Huron, Lyme, Margaretta, Milan, New Haven, New London, Norwalk, Norwich, Oxford, Perkins, Peru, Portland, Ridgefield, Ripley, Ruggles, Sherman, Townsend, Vermillion, and Wakeman.

Q. What are the boundaries, &c. of Jackson county?

A. Jackson county is bounded southeast by Meigs, S. by Lawrence, southwest by Scioto, west by Pike, northwest by Ross, north by Hocking, and northeast by Athens. Length, 30 miles; mean breadth, 15. Latitude, 38 degrees, 50 min. to 39 deg. 17 min.; longitude, from Washington city, 5 degrees 16 min. to 5 deg. 45 min, west. It is a table land, discharging creeks northwestward into Scioto river, southward and southwestward into Ohio river.—Surface extremely broken. Chief town, Jackson.

It is divided into the thirteen townships of Clinton, Milton, Bloomfield, Madison, Franklin, Scioto, Lick, Jackson, Richland, Hamilton, Harrison, Washington, and Jefferson.

Q. What are the boundaries, &c. of Jefferson county?

A. Jefferson county is bounded north by Columbiana,

by the Ohio river E. separating it from Brooke county, Va.; by Belmont, Ohio, S., and Harrison, west. Length, 27 miles, breadth 20. Lat. $40^{\circ} 10'$ to $40^{\circ} 33'$; long. $3^{\circ} 50'$ west from Washington city. Slopes Eastward towards Ohio river, and in that direction is drained by Yellow Cross and Short creeks. Surface hilly, but soil fertile and abounding in bituminous mineral coal. Chieftown, Steubenville.

It contains the thirteen townships of Knox, Island creek, Cross creek, Steubenville, Wells, Warren, Mount Pleasant, Smithfield, Wayne, Salem, Ross, Clinton, and Springfield. The principal streams are Yellow creek, Short creek, and Cross creek.

Q. What are the boundaries, &c. of Knox county?

A. Knox county is bounded S. by Licking, Delaware west, Marion N. W., Richland N., Holmes N. E., and Coshocton E. Length, 30 miles, mean width 21. Lat. $40^{\circ} 14'$ to $40^{\circ} 32'$, long. from Washington city 5° west. Slopes southeastward, and is drained by the sources of Mohiccon creek. Chieftown, Mount Vernon.

The county contains the following townships, viz Berlin, Bloomfield, Brown, Butler, Chester, Clay, Clinton Franklin, Harrison, Hilliar, Howard, Jackson, Jefferson Liberty, Middlebury, Milford, Miller, Monroe, Morgan, Morris, Pike, Pleasant, Union, and Wayne.

Q. Can you give the boundaries, etc. of Lawrence county?

A. Lawrence county is bounded by Scioto county N west, Jackson N., Gallia N. E., by Ohio river separating it from Cabell county, Va., and by Ohio river separating it Greenup county, Kentucky. Length, 30 miles, mean breadth, 13.

It lies directly opposite the mouth of Big Sandy river slopes southward, and in that direction is drained by

Symme's creek, and some smaller streams. Chief town, Burlington.

The county is divided into the following townships: Aid, Decatur, Elizabeth, Fayette, Lawrence, Mason, Perry, Rome, Symmes, Union, Upper, and Windsor. Iron ore is found in most parts of the county.

Q. What are the boundaries, &c. of Licking county?

A. Licking county is bounded southeast by Perry, south by Fairfield, Franklin southwest, Delaware northwest, Knox north, Coshocton northeast, and Muskingum east. It is 30 miles from east to west, and 24 broad. The slope is eastward, and the whole surface very nearly commensurate with the higher part of the valley of Licking creek, or more correctly, river.

The great central Ohio canal enters this county on its southern border near Hebron, sweeping a northern curve past Newark, the seat of justice; this work passes down the Licking valley, and leaves the county near the middle of its eastern side.

Though a level country, it is a rather elevated table land; the level of the canal at Newark is 834 feet above mean level of the Atlantic ocean, and 219 feet above that of the Ohio river at the mouth of Scioto river. The arable land of the county is from 900 to 1100 feet above the common ocean tides. The excellence of the soil is shown by its progressive population.

Describe Logan county.

Logan county is bounded by Champaign south, Shelby west, Allen northwest, Hardin north, and Union east.—Latitude, 40° 25' longitude, 6° 45' west; slopes southward, and is principally drained by Sandy creek branch of Great Miami, and the sources of Mad river. Chief town, Bellefontaine.

The county contains the following townships, viz:

Jefferson, Lake, M'Arthur, Miami, Monroe, Perry, Rush creek, Union and Zane.

Describe Lorain county.

Lorain county is bounded northeast by Cuyahoga, east by Medina, southeast by Wayne, southwest by Richland, west by Huron, and north by lake Erie. From S. to N. 40 miles, mean breadth 15.

The county is divided into the following townships: Amherst, Avon, Black river, Brighton, Brownhelm, Carlisle, Columbia, Eaton, Elyria, Grafton, Henrietta, Huntington, Lagrange, Penfield, Ridgefield, Russia, Sheffield, Sullivan, and Willington.

Slopes almost due north, and is drained by Black river, and some smaller streams. Chief town, Elyria.

Describe Madison county.

Madison county is bounded by Lafayette south, Greene southwest, Champaign northwest, Union north, Franklin east, and Pickaway southeast. Slopes southeastward, and is principally drained by Darby's creek. Chief town, London.

This county embraces large quantities of land, peculiarly adapted for grazing farms, and large herds of neat cattle are annually raised here.

Describe Marion county.

Marion county is bounded north by Crawford county, east by Richland, south by Delaware and Union, and west by Hardin. Length from east to west 33 miles, mean breadth 18. Slopes southward, and drained by the higher branches of the Scioto river. Chief town, Marion.

This county comprises the height of land between the Sandusky and Scioto rivers. Much of it is open plain, or table land, composing the southernmost part of what are called Sandusky plains. Much of it is however heavily timbered, and of a very rich and fertile quality. It is well watered.

Marion county contains the townships of Big Island, Canaan, Claridon, Grand Prairie, Green camp, Marion, Morven, Pleasant, Richland, Saltrock, Scott, Tully, and Richmond.

Describe Meigs county.

Meigs county is bounded southwest by Gallia, northwest and north by Athens: Ohio river separating it from Mason county, Va. east, southeast and south. Length from east to west, 30 miles, mean breadth 15. Surface very broken, but some tolerably productive. Chief town, Chester.

Its townships are Chester, Columbia, Lebanon, Letart, Olive, Orange, Rutland, Salem, Salisbury, Scipio, and Sutton.

Besides being washed by the Ohio river, it has also Shade and Leading creeks.

Describe Mercer county.

Mercer county is bounded by Vanwert north, Allen N. east, Shelby southeast, Darke south, and the state of Indiana west. Length 28 miles, mean breadth 20.

This county occupies the table land from which flows St. Mary's branch of the Great Maumee,, and on which rise the extreme sources of the Wabash. It is remarkable that both rivers assume a nearly parallel northwest course, which they maintain over Mercer into Indiana, and thence converge into directly opposite courses; the Wabash to the southwest and Maumee northeast. It is obvious from the foregoing circumstances in the course of its streams, that Mercer is among the most elevated tracts between the valleys of Ohio and St. Lawrence Chief town, St. Mary's.

The county contains the following townships, viz:—Amanda, Bath, Dublin, St. Mary's, Union and Wiltshire.

Describe Miami county.

Miami county is bounded by Montgomery south, Darke west, Shelby north, Champagin northeast, and Clarke S. east. Length and breadth nearly equal, 20 miles. It is traversed in a direction from N. N. west to S. S. E. by the main stream of Great Miami, and also by its southwest branch. The soil is generally fertile. Principal town, Troy.

Its townships are: Brown, Lost creek, Elizabeth, Bethel, Staunton, and Spring creek, on the east side of the Great Miami river, and Washington, Concord, Monroe, Union, Newton, and Newbury on the west. It was first settled by John Knoop from Pennsylvania, and Shadrach Hudson from New Jersey, in 1799.

Describe Monroe county.

Monroe county is bounded by Washington south, Morgan west, Guernsey northwest, Belmont north, and the Ohio river, separating it from Ohio county, Va. east.—Length from east to west, 36 miles; mean breadth 16.

The central part of this hilly but fertile county is a real table land, from which Sunfish creek flows eastward into Ohio river. Little Muskingum southward also into Ohio river, but by a southwest course over Washington county. Chief town, Woodsfield.

Monroe county has the following townships: Centre, Elk, Enoch, Franklin, Greene, Jackson, Malaga, Ohio, Perry, Salem, Seneca, Sunbury, Switzerland, Union, and Wayne.

Mines of stone coal, and iron ore have been found and are likely to be a source of profit.

Describe Montgomery county.

Montgomery county is bounded by Warren southeast, Butler southwest, Preble west, Darke northwest, Miami north, Clarke northeast, and Greene east. Length 24 miles, mean breadth 20.

The main stream of the Great Miami receives Mad river in the northeast part of this county at Dayton, the seat of justice, from whence the Miami canal commences. The general course of the Great Miami, and the slope of the county, is to the south-southwest. The surface is finely diversified by hill and dale, and soil fertile.

Its townships are, (beginning on the north,) Wayne, Dayton, Washington, and Miami, on the east side of the Miami river, and Butler, Randolph, Clay, Perry, Madison, Jefferson, Jackson, and German on the west.

Describe Morgan county.

Morgan county is bounded southeast by Washington, Athens southwest, Perry west, Muskingum northwest, Guernsey northeast, and Monroe east. Length, 32 miles, mean breadth 18. Slopes south southeast, and is traversed in that direction by the Muskingum river. Surface moderately hilly, and soil fertile. Chief town, MacConellsville.

Morgan county contains the following townships:—Brookfield, Noble, Olive, Olivegreen, Centre, Manchester, Bristol, Meigsville, Windsor, Penn, Morgan, Bloom, Union, Deerfield, and York.

Describe Muskingum county.

Muskingum county is bounded by Morgan county south east and south, Perry southwest, Licking west, Coshoc-ton north, and Guernsey east. Length, 27 miles; mean breadth, 26. It is traversed from north to south, and very nearly equally divided by Muskingum river. Surface moderately hilly, and soil fertile. Principal town, Zanesville.

The northwestern angle is traversed by the Ohio and Erie canal, and in the opposite direction the U. S. road passes over at the greatest breadth.

Muskingum county is divided into the following townships: Zanesville, Washington, Perry Salem, Adams

Madison, Monroe, Highland, Union, Richhill, Meigs, Blue-rock, Saltcreek, Brushcreek, Newton, Springfield, Falls, Hopewell, Licking, Muskingum, Jefferson and Jackson on the west. Blue-rock, however, is divided by the river which runs across it from north to south.

In numerous places adjacent to and in the bed of the valley of the Muskingum river, are extensive and almost inexhaustible beds of stone coal. A peculiar kind of clay, suitable for crucibles, for the manufacture of glass, is here found. The uncommon natural advantages for mills or factories, to be propelled either by water or steam, which concentrate in and about Zanesville, combine to render this an important point in the state.

Describe Paulding county.

Paulding is a western county, bounded north by Williams, east by Henry and Wood, south by Vanwert, and on the west by the state of Indiana. It is 24 miles long from east to west, by 18 broad from north to south. It is watered by the Maumee and Auglaize rivers.

Q. What are the boundaries, &c. of Perry county?

A. Perry county is bounded by Athens south, Hocking southwest, Fairfield west, Licking north, Muskingum N. east, and Morgan east and southeast. Length north to S. 23 miles, mean breadth 18. It is a table land, between the valleys of Hockhocking and Muskingum rivers, and from which creeks of the former flow west and southwest, and of the latter north and northeast. The surface is in most parts hilly, and in several mineral coal has been found.

It is found to be excellent for the production of wheat. It is divided into the following townships: Bearfield, Clayton, Harrison, Hopewell, Jackson, Madison, Monday creek, Monroe, Pike, Reading, Saltlick, and Thorn.

Q. What are the boundaries, &c. of Pickaway county?

A. Pickaway, a fertile interior county, bounded on the N. by Franklin, east by Fairfield, south by Ross, west by Fayette, and Madison counties. It is 22, by 21 miles in

extent, containing 421 square miles. It is divided into the following townships: Harrison, Addison. Walnut, Washington, Pickaway, and Salt creek east of Scioto river, and Scioto, Jackson, Wayne, Deer creek, Perry, Monroe, and Darby on the west. A considerable portion of the land is of a very superior quality, particularly that on the eastern side of Scioto river, and produces immense quantities of the different kinds of grain. The plain land equals, and perhaps exceeds any other land in the western country, for the production of wheat, generally producing from 40 to 45 bushels per acre of the best, quality. The prairies are best for corn and grass, and the barrens produce excellent pasture. Scioto river runs from north to south nearly through the middle of this county. The other principal streams are Lower Walnut, Darby and Deer creeks. The Ohio and Erie canal runs entirely across this county, from north to south. From the northern limits, it pass along the valley of the Scioto river, so far as Circleville; where it crosses on a splendid aqueduct, and then follows the western side of the river, for the remaining distance. County seat, Circleville, with a population of 1,136.

Q. What are the boundaries, &c. of Pike county?

A. Pike county is bounded south by Scioto, Adams S. west, Highland west, Ross north, and Jackson east. Length from east to west 32 miles, mean width 18. It is traversified in a S. S. west course by Scioto river; soil productive in grain, fruits and meadow grasses. Chief town Piketon. It is divided into the following townships: Camp creek, Beaver, Jackson, Mifflin, Peepee, Pebble, Perry, Seal, and Sunfish.

Q. What are the boundaries, &c. of Portage county?

A. Portage county is bounded southeast by Columbiana; Stark south; Medina west; Cuyahoga northwest; Geauga north; and Trumbull northeast. The greatest

length 30 miles is from east to west; breadth 24, and area 750 square miles; latitude $41^{\circ} 12'$, longitude Washington City $4^{\circ} 20'$ west. This county is a true table land between the valleys of Big Beaver and Cuyahoga rivers. The southwestern angle also giving source to Tuscarawas river or the northeastern constituent of Muskingum river.

The arable surface of Portage county exceeds a mean of 1,000 feet above tide water in the Atlantic, or rather more than an equivalent to two degrees of latitude. The surface is rather level, and in part deficient in good fountain water. The soil moderately fertile. The Ohio and Erie canal traverses this county in its greatest breadth and near the western border; and within it is the summit level of that work, 973 feet above the Atlantic tides. Chief town Ravenna.

Q. What are the boundaries &c. of Preble county?

A. Preble county is bounded north by Darke, Montgomery east Butler south, Union, Indiana southwest, and Wayne, Indiana northwest. Length from south to north 24 miles, breadth 18, and area 432 square miles. Latitude $39^{\circ} 45'$ longitude Washington City $7^{\circ} 40'$ west. General slope southeast, and drained in that direction by St. Clair and Franklin creeks branches of Great Miami. The soil productive. Chief town Eaton.

This county was so called after Commodore Preble, who had a few years previously, distinguished himself in the war against Tripoli. Iron ore is abundantly found in this county.

Q. What are the boundaries, &c. of Putnam county?

A. Putnam county is bounded south by Allen, Vanwert southwest, Paulding northwest, Henry north, and Hancock east. Length 24 miles, width 24, and area 576 sq. miles. Latitude 41° , and longitude 7° west intersect in this county. The general slope northwest, the whole sur-

face, with a very small exception, being in the valley of Au Glaize river. Chief town Sugar Grove. It is a new settlement.

Q. What are the boundaries, &c. of Richland county?

A. Richland county is bounded south by Knox, Marion southwest, Crawford west, Huron north, Lorain northeast, Wayne east, and Holmes southeast. It is a square of 30 miles; area 900 square miles. Latitude $40^{\circ} 46'$, longitude $5^{\circ} 33'$ west Washington City. The northern border extending along north latitude 40° , and also along the summit ridge between the valley of Ohio and that of Erie merely gives source to creeks flowing towards the latter. The northwestern angle gives source to the higher fountains of Sandusky, and along the western border rise the extreme sources of Scioto river. Though two sides are thus drained, the body of the county including at least seven-eighths of its surface, is drained by, and gives source to, Mohiccon branch of White Woman's river, and slopes to the southeast. It is a comparatively elevated and level table land, which when compared with the known height, 768 feet of the water level at Coshocton, at the mouth of White Woman's river, the table land of Richland county must be 1,000 feet above the Atlantic tides. The soil is generally good. Chief town Mansfield.

Q. What are the boundaries, &c. of Ross county?

A. Ross county is bounded on the south by Pike, southwest Highland, northwest Fayette, north Pickaway, northeast Hocking, and southeast Jackson. Length from east to west 34 miles, mean breadth 22, and area 650 square miles. Latitude $39^{\circ} 20'$, and longitude Washington City 6° west, intersect near Chillicothe and near the centre of this county, and near the same point the Scioto river receives from the west Paint creek. The former traversing the county in a S. S. E. direction. It is also traversed in all its breadth by the Ohio and Erie canal, which follows

the right or western bank of Scioto. The face of the co. is peculiarly and finely diversified. Soil productive. Chief town Chillicothe.

Q. What are the boundaries, &c. of Sandusky county ?

A. Sandusky is bounded on the north by Lake Erie, east by Huron county, south by Seneca, and on the west by Wood county. It is 30 miles long from east to west and 25 broad from north to south. The southern section slopes to the north, but towards the centre, all the streams which traverse its surface, curve in common to north-east. There are tracts of good land in Sandusky, but the general features of its surface are low, and it is consequently wet. The asperity of soil is shown by its progressive population, which was in 1820 852; in 1830, 2,851. County town is Lower Sandusky. It is divided into the following townships: Ballville, Bay, Groghan, Green creek, Hams, Portage, Riley, Sandusky, Townsend, and York.

Q. What are the boundaries, &c. of Scioto county ?

A. Scioto county is bounded by Adams west, Pike N., Jackson northeast, Lawrence east, and Ohio river separating it from Greenup county Kentucky south, and Lewis county Kentucky, southwest. Length from east to west 34 miles, mean breadth 15. It is divided into two not unequal sections by Scioto river which traverses it from N. to south. The general slope is southward; surface hilly, and soil tolerably fertile. Chief town Portsmouth. It is divided into the following townships: Bloom, Vernon, Green, Porter, Madison, Jefferson, Clay, Wayne, Morgan, Union, Washington, Brush creek and Nile.

Q. What are the boundaries, &c. of Seneca county ?

A. Seneca county is bounded by Crawford south, Hancock southwest, Wood northwest, Sandusky north, and Huron east. Length from east to west 32 miles, breadth 20. Sandusky river traverses this county flowing north-

ward. The gensral slope is of course in that direction, but from the southwest angle issues the extreme fountains of Blanchard's branch of Au Glaize river. Chief town Tiffin.

It is divided into the following townships: Adams, Bloom, Clinton, Eden, Reed, Fort Seneca, Thompson, Seneca, Scipio, Hopewell, and Venice.

Q. What are the boundaries, &c. of Shelby county?

A. Shelby county is bounded by Miami county south, Dark county southwest, Mercer northwest, Allen north, Logan northeast, and Champaign southeast. It is about 20 miles each side.

The extreme sources of Saint Mary's and Au Gluize rivers rise on the northwestern and northern borders, but the much greater part slopes southward, and gives source to Great Miami river. The extreme higher sources of Wabash rise also in Mercer county, very near the northwestern angle of Shelby. The latter comprises, therefore, a part of the high and flat table land of Ohio. Chief town Sidney.

It is divided into the following townships: Clinton, Cynthian, Grayson, Green, Lormie, Orange, Pery, Salem, and Turtle creek.

Q. What are the boundaries &c. of Stark county?

A. Stark county is bounded by Jefferson southeast, Tuscarawas south, Holmes southwest, Wayne west, Medina northwest, Portage north, and Columbiana east. Length along the eastern border 33 miles, mean breadth 25. The extreme source of Big Beaver rises in the north east angle of this county, but the far greater part of the surface is drained by the Tuscarawas and its branches: general slope southward. The main volume of Tuscarawas crosses the county from north to south nearly, along the valley of which the Ohio and Erie canal has been constructed.

The level of the canal at Massillon, near the the middle of the county is 942 feet above tide water ; the whole arable surface no doubt exceeding a mean of 1,000 feet of similar extent of comparative height. The soil is fertile in grain, pasturage and fruit. Chief town Canton.

It is divided into the following townships: Lexington, Paris, Washington, Brown, Harrison, Rase, Sandy, Osna-burg, Pike, Nimishillen, Marlborough, Canton, Plain, Lake, Green, Jackson, Perry, Bethlehem, Sugar creek, Tuscarawas, Lawrence, and Franklin.

Q. What are the boundaries, &c. of Trumbull county ?

A. Trumbull county is bounded south by Columbiana, southwest and west Portage, northwest Geauga, north Ashtabula, northeast Crawford, Pennsylvania, and east and southeast Mercer county Pennsylvania. Length 36 miles, breadth 25. Slope southeastward and drained by the Mahoning or western constiuent of Big Beaver, and its branches. The soil is generally good. Chief town Warren.

It is divided into the following townships: Kinsman, Vernon, Hartfood, Brookfield, Hubbard, Coitsville, Poland, Broadman, Lordstown, Liberty, Vienna, Towler, Johnston, Gustavus, Green, Mecca, Bazetta, Howland, Weathersfield, Austintown, Canfield, Ellsworth, Jackson, Lordstown, Warren, Bristol Bloomfield, Mesopotamia, Farmington, Southington, Bruceville Newton, Berlin, and Milton.

Q. What are the boundaries, &c. of Tuscarawas county?

A. Tuscarawas county is bounded by Harrison, east and southeast, Guernsey south, Coshocton southwest, Holmes northwest, and Stark north. Length from south to north 30 miles, mean breadth 23.

The slope of the northern part is to the south, but inflects with the course of Tuscarawas river, which in the

southern parth of the county bends to the southwest by west. Tuscarawas river enters at the extreme northern angle, and flowing south and thence inflecting gradually to the S. S. west divides it into two nearly equal sections, and has long its entire course the Ohio and Erie canal. The level of the canal near the centre of this county is 874 feet above the canal level; the arable soil averages from about 850 to above 1,000 feet of similar relative height. Chief town New Philadelphia.

It is divided into the following townships: Bucks, Clay, Dohrmon, Dover, Fairfield, Goshen, Lawrence, Oneleg, Oxford, Perry, Rush, Salem, Sandy, Sugar creek, Warren, Warwick, Washington, Wayne, and York.

This county has abundant supplies of iron ore and stone coal which promise wealth to adventurers.

Q. What are the boundaries, &c. of Union county?

A. Union county is bounded by Franklin south east, Madison south, Champaign southwest, Logan west, Hardin northwest, Marion northeast, and Delaware east. Length 27 miles, breadth 17.

Slope southeastward, and drained by numerous confluent creeks of the Scioto river. Chief town Marysville.

It is divided into the following townships: Allen, Darby, Jackson, Jerome, Leesburg, Liberty, Mill creek, Paris, and Union.

Q. What are the boundaries, &c. of Vanwert county?

A. Vanwert county is bounded north by Paulding east by Putnam and Allen, south by Mercer, and west by the state of Indiana. It is 24 miles long by 18 broad.

It was named in honor of Van Wert one of the three men who captured Major Andre. It was constituted by name and boundaries in February 1820: but was not organized at the period of our information.

Q. What are the boundaries, &c. of Warren county?

A. Warren county is bounded by Clermont, southwest

by Hamilton, Butler west, Montgomery northwest, Greene northeast, and Clinton east. Length 24 miles, mean width 20.

The Miami river and canal cross the northwest angle of this county; whilst the central parts are traversed by Little Miami. The course of both rivers, and the slope of the county to the southeast. Surface rolling and soil excellent. Besides at Lebanon, the county seat, there were in 1830. post offices at Deerfieldville, Edwardsville, Franklin, Hopkinsville, Kirkwood, Red Lion, Ridgeville, Rochester, Springboro', Twenty Mile Stand, and Waynesville. Lebanon postville and seat of justice for this county, is situated near the centre of the county 31 miles N. east Cincinnati, and by post road 83 miles southwest by Columbus.

It is divided into the following townships: Wayne, Washington, Salem, Hamilton, Deerfield, Union, Turtle creek, Clear creek and Franklin.

Q. What are the boundaries, &c. of Washington county?

A. Washington county is bounded by Athens southwest and west, Morgan northwest, Monroe northeast, Ohio river separating it from Tyler county Virginia east, and from Wood county Virginia south. Length on the northern border along Monroe and Morgan counties 50 miles. It lies in a wide resemblance to a triangle, mean breadth 15.

The slope is southward towards the Ohio river. The Muskingum enters the north western angle, and winding thence eastward to near the centre of the county, inflects to the south and falls into the Ohio river at Marietta. The surface of this county is generally very hilly, but soil productive. By the post list of 1831, besides at Marietta, the county seat, there were offices at Pelpre, Bent's, Brown's Mills, Carroll, Fearing, Little Hockhocking, Low-

er Salem, Newport, Point Harmer, Waterford, Watertown, and Wesley.

It is divided into the following townships: Adams. Aurelius, Barlow, Belpre, Decatur, Fearing, Grandview, Lawrence, Ludlow, Marietta, Newport, Roxbury, Salem, Union, Warren, Waterford, Watertown, and Wesley.

Q. What are the boundaries, &c. of Wayne county?

A. Wayne county is bounded by Stark east, Holmes south, Richland west, Lorain northwest, Medina north. Length from east to west 30 miles, mean breadth 24.

Slope southward, and drained by numerous branches of Tuscarawas, Kilbuck, and Mohiccon rivers. The Northern border approaches very near the dividing summit level between the waters of Ohio river and lake Erie. It is comparatively an elevated tract, being upwards of 500 ft. above lake Erie at a mean, and the arable surface exceeding 1,000 feet above the Atlantic tides. Chief town Wooster.

It is divided into the following townships: Baughman, Canaan, Chester, Chippewa, Clinton, Congress, East Union, Franklin, Green, Jackson, Lake, Milton, Mohican, Paint, Perry, Plain, Salt creek, Sugar creek, Wayne, and Wooster.

Q. What are the boundaries, &c. of Williams county?

A. Williams county is bounded by Henry east, Paulding south, the state of Indiana west, Hillsdale county Michigan north, and Lenawee county Michigan northeast. Length from south to north 37 miles, breadth 24.

Slope southward, and in that direction traversed by St. Joseph's and Tiffin's rivers, branches of Maumee. Chief town, Defiance.

It is divided into the following townships: Crane, Damascus, Defiance, Delaware, Jennings, Perry, and Richland.

Q. What are the boundaries, &c. of Wood county?

A. Wood county is bounded by Sandusky, on the east, Seneca southeast, Hancock south, Henry west, Lenawee county Michigan, northwest, and Monroe county Michigan, north. It is a parallelogram of the same length and breadth, as the adjacent county of Henry, 32 by 27 miles from south to north.

Slope southeastward, and traversed in that direction by Portage, river, to the southeast, and Maumee northwest. Chief town, Perrysburg.

It is divided into the following townships: Waterville, Waynesfield, and Weston.

Describe Medina* county.

Medina county is bounded north by Lorain and Cuyahoga, south by Wayne and Richland, east by Portage, and west by Huron. Length, 24 miles; mean breadth, 24.

The county contains the townships of Bath, Brunswick, Copley, Granger, Guilford, Harrisville, Hinckly, Liverpool, Medina, Montville, Norton, Richfield, Wadsworth, and Westfield.

Q. Can you give a description of the cities or towns of Ohio?

A. To enter upon a minute description, or even name all these, would much exceed the bounds of this work.

Q. Can you give a descriptive sketch of Cincinnati?

A. Cincinnati, city of Ohio, and seat of justice for Hamilton county situated on the right bank of Ohio river, by post road 597 miles (differing only 13' of latitude) from due west from Washington 112 miles southwest by west from Columbus, and 79 a little east of north Frankfort, Ken-

* The description of Medina county should have been inserted on page 220, but through the carelessness of the compositor was omitted.

tucky Latitude $39^{\circ} 06'$, longitude $7^{\circ} 32'$ west Washington City according to Tanner's map of the United State but $7^{\circ} 24' 45''$ according to Flint. The position of Cincinnati is admirable. It stands on two plains or bottoms of the Ohio, the higher elevated about 60 feet above the lower, with a rather steep intermediate bank. To an eye in the vicinity, placed on elevated ground, the city seems to occupy the centre and base of an immense basin, the view being in every direction terminated by swelling hills. The streets, laid out at right angles to each other, present an endless, though rather monotonous variety of landscape.

Fourteen of the streets are 66 feet wide, and 396 apart; 7 extending each way and crossing the other 7. Thus the intermediate squares comprise 156,816 square feet.

The public buildings already erected occupy 1 square and a fraction of another; and that part of the city built upon, approaches the form of a parallelogram.

The public buildings are, the Cincinnati college, Catholic athenæum, medical college, the mechanics institute, a theatre, two museums, hospital, and lunatic asylum, United States branch bank, court house, prison, 4 market houses, a bazaar, and the Woodward high school, a fine house.

Of churches there are 26 of which several are fine buildings, 3 banks. Commercial bank, capital \$500,000, and savings bank; there are 3 insurance companies, belonging to the city, with two branches of companies at Hartford, Connecticut.

A water company supplies the city with water from Ohio river. It is elevated by steam power to the height of 158 feet above low water mark in the river, and flowing into reservoirs, is thence distributed over the city, at an annual expense of \$8 per family at an average.

The public prints are 20 comprising, one Quarterly Medical Journal, one Monthly Magazine, one Monthly Agri-

cultural Journal, two semi monthly, two semi weekly, 10 weekly, and three daily gazettes. Thirty-two mails arrive weekly. There are two fire companies, 34 charitable and 27 religious societies.

The progressive population of this city is perhaps unequalled on a region where rapid advance is every where remarkable. It was laid out in January, 1787, but until after the treaty of Greenville, 1795, progressed but slowly. In 1810, the total population was 2,540, 1820, 9642. and in 1826, 16,230. By a very accurate enumeration in 1831, 28,014, with a floating population, not included, of 1,500, making the total at this time (1836) more than 36,000. By the census tables for 1830, the population of Cincinnati was composed of white males, 12,495; white females, 11,256; free colored males, 528, and females, 562: total 24,831.

This city, second only in population to New Orleans, amongst the western cities of the United States, has already become the seat of immense and increasing manufactures, of almost every species known in our country. Of steamboats 111 have been built here.

The iron manufactures include nearly every article of that metal demanded by a civilized and active population. Cabinet, hatting, shoe and boot making, saddlery, &c.

The imports of the city are supposed to exceed \$6,000,000, and by a recent estimate, the exports of 1835 exceed \$4,500,000. There was transported to the city during one year by the Miami canal 97,578 barrels flour, 40,455 barrels whiskey, 19,758 barrels pork, 30,960 kegs, and 1,156 barrels of lard, 1,877,240 pounds of bacon, 53,539 pounds of butter and 99 barrels of linseed oil, including ginseng, feathers, beeswax, tallow, beans, pot and pearl ashes, cheese, &c. &c., and it was also estimated that at least as great an amount of produce was brought to the city by wagons, and the river, during the same period. Among

the article exported it was estimated that \$1,000,000 consisted of steam engines, steam boat hulls, sugar mills, hats, cabinet-ware, candles, soap, type, printing presses, beer, porter, coopers' ware, cordage, books, and articles not mentioned, which are mostly sent down the Ohio.

About 45 manufacturing establishments are propelled by steam. Revenue of the city 1831, was \$35,231, and expenditure was \$33,858. Business is the chief object of this young city, but education has not been neglected. The Lane Seminary, now a flourishing institution, is located about 2 miles from the city, at Walnut Hills.

The president is professor of theology, beside which professorship, there are 4 others, 1 of church history and polity, 1 of biblical literature, 1 of languages and 1 of chemistry. A building for the purpose of the institution, 100 feet long and 40 deep, was commenced in 1832, and is now completed; cost estimated at \$8,000.

There are 2 departments in this institution, theological and literary; expences at the former per annum, including board, (tuition gratis) \$60 at the latter school, including tuition, \$80. A farm is connected with the seminary. The medical college of Ohio, located here, has 6 professorships, and another has recently commenced called the *Reformed medical college*.

There are 29 public teachers of free schools, who give instruction to 4,000 children annually. The private schools are numerous; and many of them very respectable. Mr. Flint states that 450 substantial buildings have been added to city yearly, for the last three years.

Q. can you now give a sketch of Columbus?

A. Columbus, post town and seat of justice for Franklin county and seat of the state government of Ohio. Latitude $39^{\circ} 57'$, longitude 6° west and distance 330 (by p-r, 396) miles from Washington City. Flint gives its relative position 551 miles from New York, 477 from Philadel-

phia, 755 from Boston, 429 from Baltimore, 991 from New Orleans, 377 from Nashville, and 112 from Cincinnati. It is 216 miles almost exactly due south, from Detroit. It is seated on the eastern or left bank of Scioto river, immediately below the influx of Whetstone river, the site being a gentle acclivity from the stream.

In the spring of 1812, the ground on which this now flourishing town stands, was a wilderness. By the census of 1830, the population was then 2,435. It contains a state house on a public square, of brick, 75 by 50 feet with a cupola 106 feet high, a building for public offices 100 by 25 feet; the necessary county buildings, penitentiary numerous and respectable private schools, and a classical academy, four printing offices, market-house, and an asylum for the deaf and dumb. A canal of 11 miles connects this place with the Ohio and Erie canal.

There are 6 or 7 places of public worship, and from 360 to 390 dwelling houses. The relative position of this town being very near the physical centre of the state, almost ensures its permanence as the seat of state government and having a navigable canal to unite it with the Ohio river and lake Erie, give stability to commercial prosperity.

Q. Can you describe Chillicothe?

A. Chillicothe is a post town, and capitol of Ross county. It is handsomely situated on the west bank of the Scioto river, in Scioto township, 45 miles in a direct line and 70 according to its various meanderings, from its mouth. It is situated on the western border of an extensive and fertile plain of about 10,000 acres. The site of the town is a level, elevated, alluvial plain, about 35 or 40 feet above low water mark in the river. The Scioto river washes the northern limits of the town; while Paint creek winds along its southern verge, the two streams being here about three-fourths of a mile distant from each other.

The plan and situation of Chillicothe nearly resembles that of Philadelphia: the Scioto river and Paint creek representing in this case the Delaware and Schuylkill rivers.

The principal streets of Chillicothe run parallel with the course of the river at the town, and are crossed at right angles by others, which extend from the river to the creek. The main streets which cross each other at the centre of the town, are 99 feet wide, and all the others are 66. The regular in-lots are 99 feet in front, extending back 198 feet to alleys 12½ feet wide.

The town was laid out in 1796, and contained in 1832, 2,827 inhabitants. It has three printing offices, each publishing weekly papers; 1 bank, and between 30 and 40 mercantile, and two medical stores. Here are also a number of cotton spinning factories, a rope walk, several flourishing mills, including one of steam power. Also, an oil mill, fulling mill, several saw mills, and a paper mill.

Among the public buildings are a Presbyterian, Methodist, Seceder, and Episcopal churches; an academy, courthouse, jail, and large stone market house. The market, which is held on Wednesdays and Saturdays, is well supplied with the various productions of the country. From the summit of a hill, rising very abruptly on the west end of the town, to the perpendicular elevation of 300 feet, is a most delightful view of the town and circumjacent country; interspersed, alternately, with woods and verdant lawns, among which the Scioto river and Grand canal romantically meander in their way to the Ohio.

The improvements of the town have been nearly stationary for several years past; but the construction of the Ohio Grand canal through it, has given new life and activity to its business and improvements.

In the midst of this town formerly stood one of the most

interesting mounds, of the cone shaped forms. In levelling it for the purpose of building lots, there were discovered great quantities of human bones. Chillicothe is 55 miles south of Columbus, 75 northeast from Maysville, Ky., and 93 N. E. from Cincinnati.

Q. Can you give a description of Cleaveland ?

A. Cleaveland is situated on the southern shore of lake Erie, and is the county town of Cuyahoga county. Its position is at the mouth of Cuyahoga river. During the late war it was a depot of provisions ; and a place where many boats and lake crafts were built ; and it is a noted place of embarkation on the lake. Here the Great Ohio canal connects with the lake, and passes through the central parts of Ohio, preserving for some distance, a course parallel to the Scioto ; and finally connecting with the Ohio near the mouth of that river. It is the intermediate town between Buffalo and Cincinnati, and the depot of the vast amounts of merchandize destined east and west. It cannot fail of soon becoming an important town. It is distant 130 miles westward from Pittsburg, and 150 N. easterly from Columbus.

Q. Can you describe Zanesville ?

A. Zanesville is a flourishing inland town, and seat of justice for the county of Muskingum ; containing an elegant courthouse and public offices, two glass factories, 3 printing offices, several churches for Presbyterians, Baptists, Methodists, Catholics, &c., and many neat dwellings.

The Muskingum river connects it to the northwest with the Ohio canal, and below with the Ohio river at Marietta.

Zanesville is becoming an extensive manufacturing town ; at the falls, which afford great water power, are a number of flour, saw, rolling and oil mills, and a nail and woollen factory.

This town is, however, limited in size, containing but

little more than a square mile. It is situated on the east bank of the Muskingum river in a township of the same name. It is 74 miles westerly from Wheeling, in Va., 60 northwesterly from Marietta, 70 northeast from Chilli-cothe, and 58 east from Columbus.

The great national road from Cumberland to, and through the western states passes directly through this town.

Q. Can you give a description of Steubenville?

A. Steubenville is the seat of justice for Jefferson co., and is situated on the west bank of the Ohio. It was laid out with great regularity in 1798, and is in the centre of a rich and populous country. The town was incorporated in 1805, with city privileges. It contains 3 churches, an academy, a handsome market house, a wool-len factory, a steam paper mill, a flour mill, and cotton factory.

A manufacturing spirit is increasing, and new establishments are in progress, and in contemplation. Mercan-tile business flourishes here, likewise the mechanical arts, in an eminent degree. Its distance is 38 miles southwest from Pittsburg, 25 northeast from St. Clairsville, and 150 northeast from Columbus.

Q. Can you give a description of Circleville?

A. Circleville is the county town of Pickaway county. It is situated on the east branch of the Scioto river. In limits of the town are two Indian mounds, the one square and the other circular. The town derives its name from being chiefly built on the limits of the circular mound. These mounds are among the most interesting in the western country. The great road leading from Chilli-cothe runs directly across the middle of the circles from north to south; and this is again crossed in the centre by another street running due east and west. In the centre of the circle, at the point of intersection of these streets,

is erected an elegant brick octagonal courthouse, 55 feet in diameter, which makes a conspicuous appearance.—Near the courthouse, on the north, is a small market-house; on the southwestern side of the circle, and immediately adjoining, is a conical hill, or eminence, overlooking the whole town.

Just beneath the brow of a hill bounding the plain, on the north, upon which the town is built, runs Hagar's creek, a small but valuable mill stream.

Circleville, central to a great extent of fertile soil, must become of importance. It has recently exhibited a rapid progress. Its distance south of Columbus, is 20 miles north of Chillicothe 19 miles, and west of Lancaster 20 miles.

Q. Can you give a description of Dayton?

A. Dayton is the chief town of Montgomery county, and is charmingly situated on the eastern bank [of the Great Miami, just below the confluence of Mad River, near where the Miami canal connects with the Miami R. The waters of Mad river are artificially conducted from that river to the Miami, so as to afford a great number of mill seats.

No town in the state possesses more extensive water privileges; which are partly occupied by a number of saw mills, grist mills, cotton factories, and various sorts of machinery moved by water power.

The striking increase of its prosperity is owing to its being the terminating point of the Miami canal, connecting it with Cincinnati. It is central to a rich and populous agricultural country, the trade of which this town commands. It is expected that the canal will be continued to lake Erie.

Dayton is situated 68 miles southwest from Columbus, and fifty-two by land, and 67 by the canal from Cincinnati.

Q. What is the situation of Athens?

A. Athens is situated on an elevated bluff in a bend of Hockhocking, in a position equally beautiful and healthy. It is the county town of Athens county. It is notable as the location of the Ohio University. The funds, the library, and philosophical apparatus are respectable; and it promises to be an institution of great utility to the interests of the state.

The town of Athens is situated 52 miles northwesterly from Marietta, and 160 northeasterly from Columbus.

Q. What can you say of the Internal Improvements of Ohio?

A. The people of the state of Ohio possess in a good degree the spirit of some of her sister states in this respect; and may in a few years vie with her competitors. There are already five considerable turnpikes, besides many shorter ones. The length of the first is 16 miles; of the second 48; of the third 51; of the fourth 106; this connects Sandusky with Columbus. The fifth is the McAdamized road leading from Cincinnati to the interior. The national road is McAdamized in the best possible manner.

Q. What can you say of Canals?

A. The Grand Canal, connecting Lake Erie and the Ohio passes nearly through the centre of the state from Cleaveland on the lake to Portsmouth on the Ohio. It is doubtless now complete, and in full operation. This wonderful work of uniting the waters of the Mississippi and Atlantic, has already imparted a new aspect to the country through which it passes, and has in many places quadrupled the value of the land near its course.

The Miami canal, 67 miles in length, connects Cincinnati with Dayton. These noble and beautiful modes of conveyance will soon supercede the draught of beasts of

burden, on deep and muddy roads, in all practicable directions.

Surveys have been made, and grants of land from the General Government obtained for continuing the Dayton canal to lake Erie. It traverses the counties of Scioto, Pike, Ross, Pickaway, Franklin, Fairfield, Licking, Muskingum, Coshocton, Tuscarawas, Stark, Cuyahoga, and almost or altogether a boundary line between Medina and Portage counties. The principal places on the canal are Akron, New Portage, Masillon, Bolivar, New Philadelphia, Coshocton, Newark, Bloomfield, Circleville, Chillecothe, Piketon, and Portsmouth. Private property has risen from five to ten fold along its line,

LENGTH OF THE OHIO AND ERIE CANAL.

Miles.

Main trunk from Cleaveland to Portsmouth,	310
Navigable feeder from main trunk to Columbus,	11
do do do Granville,	6
Muskingum side-cut from the Muskingum river at Dresden,	3
Navigable feeder from the Tuscarawas river,	3
Navigable feeder from the Walhonding river,	1

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Q. Describe the Miami canal.

A. The Miami canal commences at Cincinnati, and extends northwardly along the valley of the Great Miami river; a total distance of 67 miles. It passes the town of Hamilton, Middletown, Franklin, and Miamisburg, and terminates at Dayton. It has been navigated from Dayton to the head of main street, Cincinnati, since the spring of 1829. An extension of the work is now in progress to be carried along the valleys of St. Mary's and Au Glaize rivers, and unite with the Wabash and Erie canal at Defiance; distance from Cincinnati about 190 miles.—

Thence northeastwardly along the Maumee to its mouth in the western extremity of lake Erie. A grant from the United States of 300,000 acres of land to the state, on condition that the work should be prosecuted, has been accepted; the lands have been selected, sales effected to the amount of \$40,000, and it is expected the work will be commenced within the time specified by the act of Congress.

Q. What can you say of the Mahoning and Beaver canal?

A. This canal is in progress, though not yet constructed. The Ohio portion will leave Beaver county, Pennsylvania, and continue along the valley of the Mahoning river to Akron, near the Portage Summit of the Ohio and Erie canal; 77 miles of which will be in Ohio.

Describe Sandy creek and Little Beaver canal.

A. This canal is also in progress by a chartered company. It commences near the town of Bolivar, on the Ohio and Erie canal in Tuscarawas county, and passes along the line of Stark and Carroll counties, to the Little Beaver in Columbiana county, and from thence to the Ohio river.

Q. Can you describe the Railroads of Ohio?

A. The Mad river and Sandusky Railroad will extend from Dayton, on the Miami canal, to Sandusky, through Springfield, Urbanna, Bellefontaine, Upper Sandusky, Tiffin, and down the valley of the Sandusky river to lake Erie. The route is remarkably favorable for locomotive power. Length, 153 miles; estimated cost, 11,000 dollars per mile. The work was commenced in September, 1835.

The Erie and Ohio railroad is intended to be constructed from Ashtabula on the lake, through Warren to Wells-ville on the Ohio river, a distance of 90 miles. Other railroads are in contemplation in this state, the most im-

portant of which is the Great Western railroad, from Boston, by Worcester, Springfield, and Stockbridge, through New York, by Albany, Utica, and Buffalo, along the summit ridge, dividing the northern from the southern waters, through Pennsylvania and Ohio, to intersect the Wabash and Erie canal at Lafayette, in Indiana. From thence provision is already made for it to pass to the eastern boundary of Illinois, from which a company has recently been chartered to construct it across the state of Illinois, by Danville, Shelbyville, Hillsborough, to Alton, on the Mississippi. It must be a somewhat untoward circumstance that shall prevent this splendid work from being completed the whole length before 1850.

The project of a railroad from Cincinnati, to Charleston in S. Carolina, has been entered upon with great spirit in the South, and in all the states more directly concerned in the enterprise. It will, most undoubtedly, be carried into effect.

Q. What can be said of the Turnpikes of Ohio?

A. The state of Ohio has incorporated a number of turnpike companies, some of which have gone into operation.

The first is near the northeastern corner of the state, from Pierpont through Monroe and Salem townships to the mouth of Conneaut creek, 16 miles long.

The second is the Trumbull and Ashtabula turnpike, leading from Warren to Ashtabula, 48 miles.

The third is from the town of Wooster, through Medina, to Cleaveland, 51 miles.

The fourth is from Columbus to Sandusky, 106 miles, now in the course of construction.

Another from Cincinnati, through Lebanon and Columbus, to Wooster, has been commenced on the McAdamized plan, but is not completed.

A McAdamized road from Cincinnati to Chillicothe is in progress.

The National Road, constructed by the General Government and transferred to the state, passes from Wheeling through Columbus to the Indian line.

Q. What are the Agricultural Productions of Ohio?

B. The agricultural productions of Ohio are such as are common to the middle and eastern states. Indian corn, as in other western states, is a staple grain, raised with much ease, and in great abundance. More than 100 bushels are produced from an acre, on the rich alluvial soils of the bottom lands, though from 40 to 50 bushels per acre ought to be considered an average crop.

The state generally has a fine soil for wheat, and flour is produced for exportation in great quantities.

Rye, oats, buckwheat, barley, potatoes, melons, pumpkins, and all manner of garden vegetables, are cultivated to great perfection.

No markets in the United States are more profusely and cheaply supplied with meat and vegetables, than those of the large towns in Ohio.

Hemp is produced to some extent, and the choicest kinds of tobacco is raised and cured in some of the counties east of the Muskingum river.

Fruits of all kinds are raised in great plenty, especially apples, which grow to a large size, and are finely flavored.

The vine and the mulberry have been introduced, and with enterprise and industry, wine and silk might easily be added to its exports.

Q. Can you give a description of the Animals, &c. of Ohio?

Bears, wolves, and deer, are still found in the unsettled portions of the state. The domestic animals are similar

to other states. Swine is one of the staple productions, and Cincinnati has been denominated the "pork market of the world." Other towns in the west, and in Ohio, are beginning to receive a share of this trade, especially along the lines of the Miami, and the Erie canals. 150,000 hogs have been slaughtered and prepared for market in one season in Cincinnati. About 75,000 is the present estimated number, from newspaper authority. Immense droves of fat cattle are sent every autumn from the Scioto valley and other parts of the state. They are driven to all the markets of the east and south.

Q. What is the Commerce of Ohio?

A. By the local position of this state, the advantages secured for trade, may be perceived by glancing at the map. The Ohio river affords it a direct intercourse with all the country in the valley of the Mississippi; while by means of lake Erie on the north, it communicates with Canada and New York.

The Ohio canal completes a line of internal navigation from New York to New Orleans through this state. Ohio enjoys the most active commerce of all the western states. The northern and eastern counties export to Montreal and New York, by the lake, great quantities of agricultural produce. But the chief of the exports are to New Orleans. The articles are flour, grain, pork, bacon, lard, whiskey, horses, and cattle.

Q. What are the Manufactures of the State of Ohio?

A. This state, more populous than any other in the west, and possessing in many respects manufacturing capabilities, has taken precedence of all the rest in manufactures.

The principal factory for woollen goods is at Steubenville.

A number of cotton factories are in the towns along the river.

Furnaces for smelting iron ore are in operation in the counties bordering on the Ohio, near the mouth of the Scioto.

Glass is manufactured in several towns.

Considerable salt is made on the Muskingum below Zanesville, on the Scioto, and on Yellow creek above Steubenville. About half a million of bushels of it were made in the state in 1830.

Cincinnati rivals Pittsburg in the number, variety and extent of its manufacturing operations.

In every town and village through the state, mechanics' shops are established for the manufacture of all articles of ordinary use.

In 1810, the manufactures of the State amounted to nearly two millions of dollars. They must now amount to more than triple that sum. From a single township, 175 tons of cheese, worth twenty thousand dollars, were exported in one year.

Q. What can you say of the state of Education in Ohio?

A. There is a laudable zeal to advance science and education here; but it is a question if this and the other western states have not been too fond of multiplying colleges, or small institutions so called, to the neglect of common schools.

Charters for eight or ten colleges and collegiate institutions have been granted. Congress has granted 92,800 acres of public land to this state for colleges and academies. One township, (23,040 acres,) and a very valuable one, has been given to the Miami University, at the Oxford. Two townships of land, (46,080 acres,) though of inferior quality, have been given to the Ohio University. Academies have been established in most of the principal towns.

A common school system has been established by the legislature. Each township has been divided into school

districts. Taxes are levied to the amount of three-fourths of a mill upon the dollar of taxable property in the State, which, with the interest accruing from the different school funds already noticed, are applied towards the expenses of tuition. Five school examiners are appointed in each county, by the Court of Common Pleas, who are to examine teachers. The Governor, in his recent message, speaks of the common school system as languishing in proportion to other improvements.

Ohio University, at Athens, was founded in 1802;—has an endowment of 46,080 acres of land, which yields 2,300 dollars annually. A large and elegant edifice of brick was erected in 1817. Number of students about 90.

Miami University was founded in 1824, and is a flourishing institution at Oxford, Butler county, 37 miles from Cincinnati. It possesses the township of land in which it is situated, and from which it receives an income of about \$5000. Number of students about 200. Patronized by Presbyterians.

The *Cincinnati College* was incorporated in 1819, continued to be sustained as a classical institution for some years, and then suspended operations. It has been revived and re-organized lately, and will probably be sustained.

Kenyon College, at Gambier, Knox county, in a central part of the state, was established in 1828, through the efforts of the Rev. Philander Chase, then Bishop of Ohio Diocess, who obtained about \$30,000 in England to endow it. Its chief patrons were those excellent British noblemen, Lords Kenyon and Gambier. It is under Episcopal jurisdiction, and has a theological department, for the education of candidates for the ministry in the Episcopal church. It has about 150 students.

Western Reserve College is at Hudson. It was founded

by Presbyterians and Congregationalists in 1826, and has 82 students in all its departments.

Franklin College is in New Athens, Harrison county, on the eastern side of the state, and has about 50 students.

The *Granville Literary and Theological Institute* originated under the patronage of the Baptist denomination in 1831. It is designed to embrace four departments,—preparatory, English, collegiate, and theological. It is rapidly rising, and contains more than 100 students.

Oberlin Institute has been recently established in Lorain county, under the influence of “new measure” Presbyterians, with four departments, and has 276 students, as follows: In the theological department, 35; collegiate, 37; preparatory, 31; female, 73. The citizens of Cleveland have recently contributed to it \$15,000, of which six persons gave \$1000 each.

The *Willibough Collegiate Institute* is in the lake country of Ohio, and has been gotten up within a few years past.

The *Marietta Collegiate Institute* is said to be a flourishing and respectable institution, having a large number of students in various departments.

Q. What can you say of the Religion of Ohio?

A. There is a vast number of religious societies, consisting of all the known existing sects. But the Presbyterians and Methodists are the most prevalent denominations. The Shakers and Tunkers have establishments in this state. German Lutherans are likewise considerably numerous. Most people are desirous of being thought to belong to some religious denomination. It is affirmed by a gentleman, well known for his researches into the antiquities of this state, that there is a greater number of professors of religion, in proportion to the whole number of the people, than in any state in the Union. There are many religious societies, that have no regularly establish-

ed pastors. The custom of itinerating preaching, as a supply, is very prevalent. The people are generally a quiet, orderly, peaceable, moral and industrious race.—Suicide, excesses, murders in affray, and instances of deliberate and atrocious cruelty, are rare; and the general moral character of the people is highly respectable.

Describe the Penitentiary System of Ohio.

This establishment, at Columbus, is a humane and efficient one. Of the great number who have been confined there, nearly half have been pardoned out.

Name the Banks of Ohio.

A. Cleaveland, Circleville, Chillicothe, Clinton, at Columbus, Commercial at Cincinnati, Columbia at New Lisbon, Commercial bank of Lake Erie at Cleaveland, Commercial bank of Scioto at Portsmouth, Dayton bank, Farmers' bank of Canton, Farmers' and Mechanics' bank at Steubenville, Franklin bank, Franklin bank of Columbus, Hamilton bank, Geagu bank, Lancaster Ohio bank, Lafayette bank, Masillon bank, Marietta bank, Muskingum Norwalk, Sandusky, Urbana bank Company, Wooster, Western Reserve bank, Warren.

Tell me something of the Revenue of this State.

A. From the Auditor's report to the legislature of 1836 the following items are extracted. The general revenue is obtained from moderate taxes on landed and personal property and collected by the county treasurers,—from insurance, bank, and bridge companies,—from lawyers and physicians, &c. Collected in 1835, by the several county treasurers, \$150,080, omitting fractions: paid by banks, bridges, and insurance companies, \$26,060; by lawyers and physicians \$1,598; other sources, \$24,028; making an aggregate of \$201,766. The disbursements are: amount of deficit for 1834, \$16,622; bills redeemed at the treasury for the year ending November, 1835, \$182,

005; interest paid on school funds, \$33,101, &c. amounting to \$236,369 and showing a deficit in the revenue of \$33,590.

Q . What can you say of the Canal Fund ?

A. The amount of money arising from the sales of Miami canal lands up to the 15th of November, 1835, is \$310,178. This sum has been expended in the extension of the canal north of Dayton.

The amount of taxes collected for canal purposes for the year 1834, including tolls, sales of canal lands, school lands, balance remaining in the treasury of last year, &c. is \$509,322. Only \$38,242 of the general revenue were appropriated to canal purposes, of which 35,507 dollars went to pay interest on the school funds borrowed by the state.

The foreign debt is \$4,400,000; the legal interest of which is \$260,000 per annum. The domestic debt of the state, arising from investing the different school funds is \$579,287; the interest of which amounts to \$34,757,—, making an aggregate annual interest paid by the State on loans, of \$294,757. The canal tolls for the year 1835, amount to \$242,357, and the receipts from the sale of Ohio canal lands, \$64,549, making an aggregate income to the canal fund of \$306,906 per annum; a sum more than sufficient to pay the interest on all loans for canal purposes.

ITEMS OF EXPENDITURE.

Under this head the principal items of the expenditures of the state government are given.

Members and officers of the General Assembly	
per annum,	\$43,987
Officers of government,	20,828
Keeper of the Penitentiary,	1,909

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For New Penitentiary buildings,	\$46,050
State printing,	12,243
Paper and Stationery for the use of the State,	4,478
Certificates for wolf scalps,	2,824
Adjutant and Quartermaster Generals, and Brigade Inspectors,	2,276
Treasurer's mileage on settlement with the Auditor of State,	1,027
Deaf and Dumb Asylum,	5,700
Periodical works, &c.	400
Postage on Documents,	
Reporter to Court in Bank,	300
Members and clerks of the Board of Equalization, and articles furnished,	1,960
Paymaster General, Ohio Militia,	2,000

The extra session of the legislature on the boundary line, in June, 1835, was \$6,823.

LAND TAXES.

The amount of lands taxed, and the revenue arising therefrom, at several different periods, are herewith given, to show the progressive advance of the farming and other interests of the State.

<i>Years.</i>	<i>Acres.</i>	<i>Taxes paid.</i>
1809	9,924,033	\$63,991 87
1810	10,479,029	67,501 60
1811	12,134,777	170,546 74

From 1811 to 1816, the average increase of the taxes, paid by the several counties, was \$69,351. From 1816 the 1816 the state rapidly rose in the scale of prosperity and the value of property. In 1820, the number of states returned as taxable, exceeded a fraction of 13 millions while the aggregate of taxes was \$205,346.

The period of depression and embarrassment that fol-

lowed throughout the west, prevented property from advancing in Ohio.

In 1826, '27, '28, '29, '30, a considerable change in the amount of property taxable took place, from a few hundred thousands, to more than fifty millions. The total value of taxable property of the state for 1835, (exclusive of three counties from which returns had not been received, amounts to the sum of *ninety-four millions four hundred and thirty-seven thousand, nine hundred and fifty one dollars.*

Describe the Antiquities of the State.

We have space to add but little upon this subject. The most remarkable are at Worthington, Granville, Athens, Marietta, Gallipolis, Paint creek, Circleville, and on the Little Miami. The domestic utensils, pottery, vases, and trinkets of the inhabitants who probably reared them, are found in and about the mounds. The instruments of their warfare are discovered, too, and give clear indications that they cultivated the horrid art of shedding human blood. Most of the human bones, which are dug in great quantities from the mounds, moulder on exposure to the air. The skulls in most instances remain, and great numbers are shown in the museums. They evidence a surprising variety in the retreat of the facial angle of the skulls. It is affirmed, that marks of iron tools are found upon the wood dug up from the depths below the surface of the prairies. A sword is preserved as a curiosity, which is said to have been enclosed in the wood of the root of a tree which could not have been less than 500 years old. We have not seen this sword, but we have seen a diminutive horse shoe dug up at a depth below the surface, in grading street near the mansion of Judge Burnett in Cincinnati. It was smaller than the kind of shoe required for the smallest kind of asses. A number of the nails was in it, and the corrosion by rust was such as might

be expected to result from the oxidation of 500 years. Many of these mounds are composed of different earths from that which is found in their vicinity. It is the most inexplicable of all the mysterious circumstances connected with these mounds, that the material of these immense structures, some of which would require the labor of a thousand men for some time in the erection, should have been from a distance. There is no conceivable motive why the earth, on which the mounds rest, should not have subserved all purposes that we can imagine the builders to have had in view. We know with what scrupulous care the Jews threw a little of the earth of the Holy Land into the graves of their friends. Possibly this transfer of earth for the mounds, from a distance may have reference to affecting remembrances, like those of the Jews.

We have elsewhere described the most remarkable mounds at Circleville. Engravings of its form may be seen in books that treat upon this subject.

Q. What can you say of the History of Ohio?

A. The first permanent settlement of Ohio, was made at Marietta, on the 7th of April 1788, by 47 persons from Massachusetts, Rhoad Island, and Connecticut. This was the nucleus around which has grown up the populous state of Ohio. Amongst the most active promoters of the colony, were those called then the Ohio company. "The next settlement was that of Symmes, purchase, made at Columbia, six miles above Cincinnati, in November 1789, by Major Stiles and 26 others, under the direction of Judge Symmes. A colony of French emigrants settled at Gallipolis, in 1791. In 1791 settlements were made by New England emigrants at Cleaveland and Conneaut, on the southern shore of Lake Erie. The intermediate country gradually filled up by emigration from various parts of the United States. Some slight diversity exist, in dif.

ferent sections of the state, in manners, customs, and feelings, amongst the people, in accordance with the states or counties from which they or their fathers emigrated. These shades of character will become blended, and the next generation will be Ohioans.

In whatever aspect we contemplate this wonderful state the mind is affected with surprise and pleasure.

We experience surprise, for the history of colonies affords no similar example of colony of equal numbers, improvement and prosperity so rapidly springing from a solid forest wilderness, with no adventitious aid, except the fertility of its lands, the freedom of its institutions, and the enterprising character of the American people.

The real lover of freedom, who firmly believes in the strength and perpetuity of our institutions, contemplates the prospect with unmingled pleasure. Ohio, all things considered, and her character and institutions carefully analyzed, is the most completely democratic community with which we are acquainted, here, if the enemies of democracy were to be credited, ought to be found the most revolting effects of ferocity and misrule. Insurrection and anarchy, and lawless violence should be the order of things.

This state, on the contrary, is making great exertions to diffuse general education; and there is not perhaps in the world, a more peaceable and orderly community, or where the people are more entirely obedient to the laws of the land.

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22*

	Mls.	Mls.		Mls.	Mls.
5. From Wheeling to Cincinnati, via Circlevile and Lebanon. From Wheeli. to Zanesville,			Orwell,	11	29
Cincinnati as in	74		Bloomfield,	5	34
No. 12.	161	235	Bristolville,	4	38
			Warren,	11	49
			Canfield,	16	65
			Columbiana,	11	76
			New Lisbon,	10	80
			Wellsville,	12	98
			Knoxville,	8	106
			Steubenville,	13	119
			Wellsburg,	8	127
			Wheeling Va.	16	143
6. From Sandus- ky to Cincinna- ti, via Dayton. From Sandus. to Lower Sandusky,	28		8. From Sandus- ky City to Cin- cinnati, via Springfield and Yellow Spring. From Sand. C. to Springfield as in	143	
Fort Seneca.	9	37	No. 2.	70	213
Oakley,	6	43	Cincinnati as in		
Tymochtee,	12	55	No. 2.		
Upper Sandusky,	9	64			
Grand,	10	74			
Hardin,	16	90			
Bellefontaine,	20	110			
West Liberty,	10	120			
Urbana,	10	130			
Springfield,	13	143			
Fairfield,	13	156			
Dayton,	10	166			
Alexandersville,	7	173			
Miamisburg,	3	176			
Franklin,	7	183			
Middletown,	6	189			
Hamilton,	13	202			
Carthage,	15	217			
Cincinnati,	6	223			
7. From Ashtabu- la to Wheeling, Va. From Ashtab. to Jefferson,	9		9. From Zanes- ville to Cleve- land. From Zanesv. to Dresden,	14	
Austinburg,	6	15	Roscoe,	14	28
Morgan,	3	18	Coshocton,	1	29
			Newcomerstown,	18	46
			Gnaddenhuetten	11	57
			New Philadelphia,	10	67
			Zoar,	10	77
			Sandyville,	4	81
			Canton,	13	94
			Greentown,	10	104
			Union,	4	108
			Middleburg,	8	116
			Talmadge,	3	119

	Mls.	Mls.
Northampton,	6	125
Stow,	3	128
Cleveland,	28	154

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10. *From Columbus to Sandusky.*

<i>From Columb. to</i>	Mls.	Mls.
Blendon,	10	
Genoa,	7	17
Sunbury,	5	22
Mount Vernon,	23	45
Fredericktown,	7	52
Bellville,	9	61
Mansfield,	10	71
Truxville,	12	83
New Haven,	11	94
La Fayette,	5	99
Norwalk	13	112
Milan,	3	116
Sandusky,	12	128

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11. *From Steubenville to Chardon.*

<i>From Steubenville to</i>	Mls.	Mls.
Richmond,	11	
Rocktown,	17	28
Centreville,	5	33
New Harrisburg,	7	40
Waynesburg,	6	46
Canton.	12	58
Randolph,	15	73
Rootstown,	5	78
Ravenna.	6	84
Shalersville,	5	89
Mantua,	4	93
Auburn,	6	99
Newbury	7	106

	Mls.	Mls.
Chardon,	9	115

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12. *From Zanesville to Cincinnati via Lebanon.*

<i>From Zanesv. to</i>	Mls.	Mls.
Lancaster,	36	
Circleville,	22	58
Williamsport,	10	68
New Holland,	8	76
Washington,	10	86
Wilmington,	22	108
Clarksville,	9	117
Rochester,	8	125
Lebanon,	7	132
Cincinnati,	29	161

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13. *From Cincinnati to Indianapolis via Brookville.*

<i>From Cincinnati to</i>	Mls.	Mls.
Cheriot,	7	
Miami,	10	17
Harrison,	8	25
New Trenton,	7	32
Brookville.	11	43
Somerset,	15	58
Rushville,	16	74
Hanover,	17	91
Indianapolis,	24	115

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14. *From Cincinnati to Indianapolis via Lawrenceburg.*

<i>From Cincinnati to</i>	Mls.	Mls.
Cheriot,	7	

	Mls.	Mls.		M's.	Mis.
Elizabethtown,	10	17	Eaton.	5	26
Hardinsburg,	3	20	Richmond,	16	42
Lawrenceburg,	2	22	Centreville,	6	48
Manchester,	9	31	Germantown,	7	55
Napoleon,	21	52	Doublin,	4	59
Greensburg,	12	64	Lewisville,	7	66
Shellyville,	22	86	Middleton,	6	72
Indianapolis,	27	113	Charlottesvile,	8	80
---			Greenfield,	9	89
			Columbia,	10	99
			Indianapolis,	12	111
15. <i>From Cincinnati to Greenville.</i>					
From Cincinn. to					
Carthage,	6		17. <i>From Beaver</i>		
Hamilton,	15	21	<i>Pa. to Cleave-</i>		
Middletown,	13	34	<i>land.</i>		
Franklin,	6	40	From Beav. Pa. to		
Miamisburg,	7	47	Griersburg,	12	
Alexandersville,	3	50	Petersburg,	9	21
Dayton,	7	57	Poland,	9	30
Little York,	8	65	Boardman,	3	33
Union,	4	69	Canfields,	5	38
West Milton,	6	75	Elsworth,	5	43
Troy,	6	81	Milton,	8	51
Piqua,	2	83	Palmyra,	3	54
Greenville,	25	103	Edinburg,	7	61
---			Bavenna,	6	67
			Stow,	10	77
16. <i>From Dayton to Indianapolis.</i>			Hudson,	6	83
From Dayton to			Twinsburg,	4	88
Liberty,	7		Bedford,	7	95
West Alexandria,	14	21	Newburg,	5	100
			Cleveland,	5	105

INDIANA.

Whence is the name Indiana derived ?

A. From the original tenants and owners of the land, as the name indicates.

Q. What are the boundaries, &c. of Indiana ?

A. Length 240, breadth 150 miles. Between $37^{\circ} 48'$ N. latitude, and $7^{\circ} 45'$ and 11° west longitude. Bounded north by the State of Michigan and lake Michigan, east by Ohio, south by the Ohio river, which separates it from Kentucky, and west by Illinois. It contains about 37,000 square, equal to 23,680,000 acres.

Q. What are the names of the mountains in Indiana ?

A. There are no mountains in Indiana ; the country is however in some parts hilly, particularly towards the Ohio river. A range of hills, called the Knobs extends from the falls of the Ohio to the Wabash, and separates the waters of the Ohio from those of the White river. North of the Wabash, between Tippecanoe and Ouitanon, the Wabash hills are found, which are rather precipitous. These constitute the principal hills of Ohio.

Can you describe the rivers of Indiana ?

A. The description of the Ohio river will be found in the account of the rivers of Ohio.

Wabash, river of the United State in Ohio, Indiana and Illinois and the great northwestern constituent of the Ohio river. Besides many minor streams, the Wabash is composed of three main branches, Little Wabash on the southwest Wabash proper in the centre, and White river on the eastern side of the valley. Little Wabash rises in Shelby county Illinois, interlocking sources with those of Kaskaskia river, and flowing thence in a S. S. E. direction over Fayette, Clay, Wayne, and White counties Illinois, falls into the main channel of the Wabash, between White and Gallatin counties, about 10 miles direct course above the influx of Wabash into Ohio river.

* The entire course of Little Wabash is about 110 miles, mean breadth of its valley 25, and area 2,750 square miles, between latitude $37^{\circ} 50'$, and $40^{\circ} 30'$.

Embarras river is another branch of the Wabash, the whole valley of which lies in the state of Illinois, The Embarras has its extreme source in Vermillion county Illinois, interlocking sources with those of Vermillion, Kaskaskia and Little Wabash rivers.

Flowing nearly parallel to the latter, over Edgar, Clark, and Drawford counties, it falls into the Wabash 10 miles below Vincennes, after a course of about 100 miles. Mean width of the valley 20 miles, and area 2,000 square miles.

The valley of the Embarras occupies the space between the higher sources of Kaskaskia, and the main Wabash. In the distance of 100 miles, air measure, from the influx of Embarras to that of Vermilion, the Wabash does not receive a stream from the right, or from the state of Illinois above the size of a large creek.

Vermillion river rises in the state of Illinois, to the N. wards of Vermillion county, interlocking sources with the Embarras and Kaskaskia, and with those of the Sangamon and Pickman branches of Illinois river.

Flowing 60 miles to the southward, it falls into the main

channel of the Wabash, after having traversed Vermillion county of Illinois, and Vermillion county of Indiana. Tippecanoe, as laid down by Tanner, is the extreme N. ern source of the Wabash, rising at latitude $41^{\circ} 30'$, and longitude 9° west Washington City, interlocking sources with those of Kankakee branch of Illinois river, and with the Elkhart, or southern branch of the St. Joseph's of river, of lake Michigan. Howing 70 miles, first to the S. west, and thence curving south, Wabash in the northern margin of La Fayette county.

The left inclined plane of the Wabash valley, is in length about 330 miles, the breadth in no place extends to 60, and averaging about 35 miles from the main channel; area 11,550 square miles.

Wabash proper rises on the great plateau, or table land between the Ohio river and lakes Erie and Michigan, and within five miles of the junction of St. Joseph's and Saint Mary's rivers.

The country from which the Wabash rises, is amongst the most remarkable on the earth. The constituents of the Maumee, the St. Joseph rising in Michigan, and Saint Mary's rising in the state of Ohio, each flow a distance of 70 miles, in complete accordance with the confluent of Wabash; but uniting at Fort Wayne, Allen county Indiana, the united waters, in place of continuing what would be apparently the natural course, down the channel of the Wabash, turn in a directly opposite direction, and form the Maumee; this flowing northeastwardly 110 miles, is lost in the southwestern bay of lake Erie.

The central plain is indeed so nearly a dead level, as to admit but little current in the streams. That which is laid down by Tanner as the main source of Wabash, rises in Mercer and Darke counties Ohio, flowing thence N. west by west, it enters Indiana, and after a course of 60

miles, receives Little river, from the central table land in Allen county.

It is the sources of the latter stream, which so nearly approach the junction of St. Mary's and St. Joseph's rivers, and it is along its channel, that a canal has been proposed to unite the Wabash and Maumee rivers. The Wabash, already a navigable stream at the influx of Little river, inflects a little south of west 50 miles, receiving the Salamanic and Missisinewa from the southeast, Eel river from the northwest. Below the influx of Eel river, the main channel inflects to southwest 70 miles, receiving the Tippecanoe 30 miles below the mouth of Eel river.

At the lower end of the last mentioned course, according to Tanner's United State, the channel of Wabash is only about 10 miles from the eastern boundary of Illinois; but deflecting a very little west of south, it continues 60 miles entirely in Indiana, to a point between Vigo county of the latter, and Clarke county of Illinois.

From hence the main channel continues a general course 120 miles forming a boundary between the two states, and receiving the Little Wabash from the northwest, and the White river from the northeastward.

White river is the most considerable branch of Wabash draining the large space between the main stream above their confluence, and that part of Ohio river between the mouths of Miami and Wabash.

The valley of White river, comprising an area of 11,000 square miles, is drained by innumerable smaller streams which first unite in two branches, which again by their union form White river. White river proper, or the N. ern branch, has its extreme source in Randolph county Indiana, but almost on the western border of Darke county Ohio.

Flowing thence westward 70 miles, over Randolph, Delaware and Madison counties into Hamilton county, it

inflects to southwest, and traverses Hamilton, Marion, Morgan, Owen, and Greene counties, thence separating Daviess from Knox county, it receives the East Fork, after an entire course of upwards of 200 miles.

The East Fork, though not having an equal length of course, drains very little, if any less surface, than the main branch.

The former rises in Henry and Hancock counties, and flowing a southwestern course, drains the counties of Henry, Hancock, Rush, Shelby, Decatur, Bartholomew, Jennings, Scott, Jackson, Monroe, Lawrence, Martin, Orange, and part of Jefferson, Dubois, and Daviess.

It may be noticed, as a remarkable peculiarity of White river, that its extreme eastern source rises within less than one mile of the bank of Ohio river; and flowing directly from that great stream, thus singularly turned by the features of the country, its waters unite with the Wabash, and finally with the Ohio, 160 miles in a direct line from its source in Jefferson county.

A ridge of hills extends entirely over Indiana, from the mouth of Great Miami to that of Wabash, across the counties of Dearborn, Switzerland, Jefferson, Scott, Washington, Orange, Crawford, Dubois, Spencer, Warlick, Gibson, Vanderburg, and Posey.

From this ridge creeks are discharged on each side, into the Ohio and White river respectively, the two streams flowing very nearly parallel in a direction southwest by west.

The entire valley of Wabash approaches the form of an ellipsis, the longer axis 300 miles from the extreme southwestern sources of Little Wabash, to the northern fountains of Eel river.

Its greatest breadth is 200 miles, from the sources of Graham's Fork, near Madison in Jefferson county Indiana

to the N. western fountains of Vermillion river, in the state of Illinois.

The whole area of the valley contains about 40,000 sq. miles, exceeding by a small fraction a fifth part of the superficies of the whole Ohio valley. In fixing the relative extent of the confluent of the Ohio, Wabash is the third in the length of its course, and second in regard to the area drained; being in the former case, exceeded by Tempee and Cumberland, but in the latter by Tennessee only. As a navigable channel, Wabash is a very important stream. It is but slightly impeded by falls and rapids, and its course seems to be almost artificially drawn to form a part of the line of commercial connexion between the Mississippi river and Lake Erie.

Saint Joseph's, river of lake Michigan, has interlocking sources with those of Eel river, branch of Wabash; those of Saint Joseph's of Maumee, Tiffin's of Maumee, the river Raisin of lake Erie, and with those of Kalamezoo river of lake Michigan.

The most remote source is in Hillsdale county Michigan, but the numerous confluent drain nearly all Branch, Saint Joseph, Baso and Berrien, with part of Calhoun, Kalamazoo, and Van Buren counties Michigan; and all La Grange and Elkhart, with part of Saint Joseph's and La Porte counties Indiana.

The various streams which contribute to form Saint Joseph's river, unite in Michigan, and the main stream inclining southwest, enters Indiana in the northeast part of Elkhart county, and thence sweeping an elliptic curve over the northern sections of Elkhart and Saint Joseph's counties, re-enters Michigan by a northwestern course, which it maintains over Berrien county to its final entrance into lake Michigan. The Saint Joseph's river of lake Michigan is a large stream in proportion to length. The utmost length of the valley it drains is 110 miles,

whilst the mean breadth is fully 40 miles; area 4,400 sq. miles.

This valley is also amongst the finest regions of the Saint Lawrence basin. In latitude it extends from $41^{\circ} 15'$ to $42^{\circ} 20'$; and from about 80 to 180 miles a little S. of west from Detroit.

The valleys of Saint Joseph's, Kalamazoo, and Grand rivers follow each other from south to north.

Elkhart, river of Indiana rising in the Putawatomie country, interlocking sources with those of Tippecance and Eel river branches of Wabash, and flowing thence N. northwest enters and gives name to Elkhart county within which it falls into the left side of St. Joseph's river of Michigan after a comparative course of 40 miles. The mouth of Elkhart river is almost exactly on longitude 9° west of Washington City and at north latitude $41^{\circ} 44'$.

Some of the western branches of Elkhart interlock their sources with those of Kankakee, and of course with the extreme eastern tributary waters of Illinois river.

For Kankakee river, see Illinois river in the description of the state of Illinois.

Q. What can you say of the bays and harbors of this State?

A. Very little.—Michigan City in La Parte county situated at the point where the Wabash and Erie rail road will unite with Michigan which opens a communication between the river Wabash and the Lake; is the only place we can describe as a harbor.—This promises to become a place of considerable importance to the state.

Q. What can you say of the face of the Country?

A. The counties bordering on the Ohio river are hilly;—sometimes abrupt, precipitous, stony, occasionally degenerating in Knobs and ravines. Commencing at the mouth of White river on the Wabash, and following up

that stream on its east fork, and thence along the Muska-
kituck, through Jennings, and Kipley counties to Law-
renceville, and you leave the rough and hilly portion of
Indiana, to the right. Much of the country we have de-
nominated hilly is rich, fertile land, even to the summits
of the hills. On all the streams are strips of rich alluvi-
an, of exhaustless fertility.

The interior, on the two White rivers and tributaries,
is moderately undulating, tolerably rich soil, and much of
it heavily timbered with oaks of various species, poplar,
beech, sugar tree, walnut, hickory, elm and other varieties
common to the West.

There is much level, table land, between the streams.
Along the Wabash, below Terre Haute, is an undulating
surface, diversified with forest and prairie, with a soil of
middling quality, interspersed with some very rich tracts.
Along the Wabash and its tributaries above Terre Haute
the land in general is first rate,—a large portion forest,
interspersed with beautiful prairies.

The timber consists of oaks of various species, poplar,
ash, walnut, cherry, elm, sugar tree, buckeye, hickory,
some beech, sassafras, lime, honey locust, with some cot-
ton wood, sycamore, hackberry and mulberry on the
bottom lands.

The undergrowth is spice bush, hazel, plum, crab apple
hawthorn and vines. Along the northern part of the state
are extensive prairies and tracts of barrens, with groves
of various kinds of timber and skirts of burr oak.

Towards lake Michigan, and along the Kankakee and
St. Joseph rivers, are lakes, swamps and marshes.

Perhaps no part of the western world can show greater
extends of rich land in one body, than that portion of
White River country, of which Indianapolis is the cen-
tre. Judging of Indiana from travelling through the south
front from 12 to 20 miles from the the Ohio, we should

not, probably, compare it with Ohio or Illinois. But now, when the greater part of the territory is purchased of the Indians, and all is surveyed, and well understood, it is found that this state possesses as large a portion of first rate lands, as any in the western country. With some few exceptions of wide praries, the divisions of timbered and prarie lands are more happily balanced, than in other parts of the western country. Many rich praries are long and narrow, so that the whole can be taken up, and timber be easily accessible by all the settlers. There are hundreds of praries only large enough for a few farms.

Even in the large praries are those beautiful islands of timbered land which form such a striking feature in the western praries. The great extent of fertile land, the happy distribution of rivers and springs, may be one cause of the unexampled rapidity, with which this state has peopled. Another reason may be, that it being a non-slave holding state, and next in position beyond Ohio, it was happily situated to arrest the tide of emigration, and cause to settle beyond Ohio, after that state was filled.

We add a few remarks, in a single view, upon the qualities of the soil, on the several rivers, and near the towns, which we shall describe. There is a much greater proportion of beech timber in this state than in Ohio. It is clearly the principal kind of timber. This state is equally fertile in corn, rye, oats, barley, wheat, and the several grains in general. Vast extents of the richer praries, and bottoms, are too rich for wheat, until the natural wild luxuriance in the soil has been reduced by cropping. Upland rice has been attempted with success. Some of the warm and sheltered valleys have yielded, in favourable years, considerable crops of cotton. No country can exceed this in its adaptedness for rearing the finest fruits, and fruit bearing shrubs. Wild berries are in many places

abundant; and on some of the prairies the strawberries are large and fine. It is affirmed, that in the northern parts, in the low prairies, whole tracts are covered with the beautiful fowl-meadow grass, of the north. It is a certain fact, that wherever the Indians or the French have inhabited long enough to destroy the natural prairie grass, which it is well known, is soon eradicated, by being pastured by the domestic animals, that surround a farmer's barn, this grass is replaced by the blue grass of the western country, which furnishes not only a beautiful sward, but covers the earth with a mat of rich fodder, not unlike the second crop which is cut in the northern state, as the most valuable kind of hay. For all the objects of farming, and raising grain, flour, hemp, tobacco, cattle, sheep, swine, horses, and generally the articles of the northern and middle states, emigrants could desire no better country than may be found in Indiana. In the rich bottoms in the southern parts, the reed cane, and uncommonly large ginseng are abundant.

Q. What are the minerals of Indiana?

A. Stone coal of the best quality is found in several places. Native copper has been discovered in small masses, in the northern part of the state. Iron ore is also found in some places. But in general, it is a country too level to be a mineral one. From the first settlement of the country it has been asserted, that there is a silver mine at Ouitanon. The mineral features will be noticed in the description of each county.

Q. Are there any mineral or medical springs in this State?

There are salt springs in different parts of the state. We do not know that any of them are worked to much extent. The salt has hitherto been chiefly brought from the United States' Saline, back of Shawneetown, or from

the salines of Kenhawa. Medical springs are not found in this state.

Q. Are there any caves in this state?

A. Like Alabama and Tennessee, this state abounds with subterranean wonders, in the form of caves. Many of them have been explored, but few described. Not far from Big Blue river, there is a large one, the entrance to which is on the side of a hill, that is about 400 feet high. Here are found great quantities of sulphate of magnesia, or Epsom salt, and of nitre, &c. The annexed description is from the pen of Mr. Adams:

“ The hill in which it is situated, is about 400 feet high from the base, to the most elevated point; and the prospect to the south-east is exceedingly fine, commanding an extensive view of the hills and valleys bordering on Big Blue river. The top of the hill is covered principally with oak and chestnut. The side of the south-east is mantled with cedar. The entrance is about midway from the base to the summit, and the surface of the cave preserves in general about that elevation; although I must acknowledge this to be conjectural, as no experiments have been made with a view to ascertain the fact. It is probably owing to this middle situation of the cave, that it is much drier than is common. After entering the cave by an aperture 12 or 15 feet wide, and in height in one place three or four feet, you descend with easy and gradual steps into a large and spacious room, which continues about a quarter of a mile, varying in height from 8 to 30 feet, and in breadth from 10 to 20. In this distance, the roof is in some places arched, in others a plane, and in one place it resembles the inside view of the roof of a house. At the distance above named, the cave forks, but the right hand fork soon terminates, while the left rises by a flight of rocky stairs, nearly 10 feet high, into another story, and pursues a course at this place nearly south-

east. Here the roof commences a regular arch, the height of which from the floor varies from 5 to 8 feet, and the width of the cave from 6 to 12 feet, which continues to what is called the 'creeping-place'—from the circumstance of having to crawl 10 or 12 feet into the next large room. From this place to the pillar, a distance of about one mile and a quarter, the visitor finds an alternate succession of large and small rooms, variously decorated; sometimes traveling on a pavement, or climbing over huge piles of rocks, detached from the roof by some convulsion of nature. The aspect of this large and stately white column, as it heaves in sight from the dim reflection of the torches, is grand and impressive. Visitors have seldom pushed their inquiries further than 200 or 300 yards beyond this pillar. This column is about 15 feet in diameter, from 20 to 30 feet high, and regularly reeded from the top to the bottom."

Q. What are the natural productions of this State?

A. See face of the country, soil, &c. In which is mentioned the principal forest trees.

Q. What is the climate of this State?

A. In point of salubrity, we can do no more than repeat the remarks which have so often been found applicable to the western country in general, and which from the nature of things must apply to all countries. The high and rolling regions of this State are as healthy as the same kinds of land in the other parts of the United States. The wet prairies, swampy lands, and tracts continuous to small lakes and ponds, and inundated bottoms, intersected by bayous, generate fevers and ague, and autumnal fevers, and impart a bilious tendency to all disorders of the country. The beautiful prairies above Vincennes on the Wabash, in the neighborhood of Fort Harrison and Tippecanoe, are found to have some balance against their fertility, beauty of appearance, and the ease

with which they are cultivated, in their insalubrity. That the settlers in general, have found this State, taken as a whole, favorable to health, the astonishing increase of the population, bears ample testimony.

The winters are mild, compared with those of New England or Pennsylvania. Winter commences in its severity about Christmas, and seldom more than six weeks. During this time, in most seasons, the rivers that have not very rapid currents, are frozen. Though winters do occur in which the Wabash cannot be crossed upon the ice.

About the middle of February, the severity of winter is past. In the northern parts of the state, snow sometimes, though rarely, falls a foot and a half in depth. In the middle and southern parts it seldom falls more than six inches. Peach trees are generally in blossom early in March. The forest trees begin to be green from the 5th to the 15th of April. Vast numbers of flowering shrubs are in full flower, before they are in leaf, which gives an inexpressible charm to the early appearance of spring. Vegetation is liable to be injured both by early and late frosts.

Q. What can you say of the Government of Indiana?

A. The constitution of Indiana was adopted on the 10th of June, 1816, and contains the following essential provisions:

Representatives shall be chosen annually, by the qualified electors of each county respectively, on the first Monday in August.

Senators shall be chosen for three years, on the first Monday in August, by the qualified voters for representatives.

Qualifications for Representatives and Senators the same as in Pennsylvania.

The Governor holds his office for three years, or until a successor shall be chosen and qualified. He is required

to be 30 years of age, a citizen of the United States 10 years, and have resided in the state five years next preceding his election. He has the usual powers of governors of states.

The judiciary power of this state, both as to law and equity, shall be vested in one supreme court, in circuit courts, and such other inferior courts, as the general assembly may, from time to time, direct and establish.

Every white male citizen of the United States, of the age of 21 years and upwards, who has resided in the state one year immediately preceding such election, shall be entitled to vote in the county where he resides. All elections by ballot. There shall be neither slavery nor involuntary servitude in this state.

The other provisions of the constitution of Indiana have the ordinary features of those in other states.

Q. What can you say of the Indians of this State?

A. Until recently, they owned the greater part of the fertile lands in this state. Most of these lands have lately been purchased of them by treaty. The names of the tribes, as they used to be, convey little idea of their present position and numbers. Great numbers have emigrated far to the west, on White river and Arkansas.—Others have strayed into Canada, as towards the sources of the Mississippi, and their deserted places are rapidly filling with the habitations of white men. Their names, as they used to be, are Mascontins, Prankashaws, Kickapoos, Delawares, Miamies, Shawnees, Ouitanons, Eel Rivers, and Pottawattomies. Their present numbers cannot exceed four or five thousand souls. It is an unquestionable evidence of the fertility of the country in the interior of Indiana, that it was once the seat of the most dense Indian population in the western country. The Indians invariably fixed in greatest numbers where the soil was fertile, the country healthy, and the means of

transport on water courses easy and extensive. Such countries abounded in fish and game, and such was the country in question.

The Indians in this country were invaded in 1791 by Gen. Wilkinson. He destroyed their principal town. It contained 120 houses, eighty of which were roofed with shingles. The gardens and improvements about it were delightful. There was a tavern with cellars, bar, and public and private rooms; and the whole indicated no small degree of order and civilization. The prophet's town, destroyed by Gen. Harrison in November, 1811, was a considerable place.

The Miamees possess a reservation near Logan's Port, of 36 square miles of land of the finest quality. Their numbers are 1,150. Beside their rich lands, they have an annuity of \$25,000, which, with their possessions, render them wealthy.

Near the Kankakee Ponds, north of the Wabash, reside the Pottawatomies, who are more numerous than the Miamees. These Indians, in 1826, ceded lands to the United States, for the purpose of causing a road to be constructed from lake Michigan by way of Indianapolis, to the Ohio. Congress confirmed the grant; and the road has been laid out and rendered passable.

Q. What is the Population of Indiana?

A. The population of the state in 1800, amounted to 4,875; in 1810 to 24,520; in 1820 to 147,178; and in 1830 to 343,031. The progressive population of Indiana was 132 per cent. during the 10 years preceding the last census.

Q. What are the Civil Divisions of Indiana?

A. It is divided into 69 counties. The following table exhibits, at one view, the names of the counties, the date of their formation, their area in square miles, their population in 1830, and their seats of justice.

COUNTIES.	Date of Formation.	Squ. Miles.	Population in 1830.	SEATS OF JUSTICE.
Allen, - -	1823	720	1,000	Fort Wayne,
Bartholomew, -	1821	588	5,800	Columbus,
Boon, - -	1830	400	622	Lebanon,
Carroll, - -	1828	450	1,614	Delphi,
Cass, - -	1829	460	1,154	Logansport,
Clark, - -	1802	400	10,719	Charlestown,
Clay, - -	1825	360	1,616	Bowlinggreen,
Clinton, - -	1830	450	1,423	Frankfort,
Crawford, - -	1818	350	3,184	Fredonia,
Daviess, - -	1816	460	4,512	Washington,
Dearborn, - -	1802	448	14,573	Lawrenceburgh,
Decatur, - -	1821	400	5,854	Greensburg,
Delaware, - -	1827	440	2,372	Muncytown,
Dubois, - -	1817	420	1,774	Jasper,
Elkhart, - -	1830	576	935	Goshen,
Fayette, - -	1818	200	9,112	Connersville,
Floyd, - -	1819	200	6,363	New Albany,
Fountain, - -	1825	400	7,644	Covington,
Franklin, - -	1810	400	10,199	Brookville,
Gibson, - -	1813	450	5,417	Princeton,
Grant, - -	1831	415	—	Marion,
Greene, - -	1821	540	4,250	Bloomfield,
Hamilton, - -	1823	400	1,705	Noblesville,
Hancock, - -	1828	340	1,569	Greenfield,
Harrison, - -	1808	470	10,288	Corydon,
Hendricks, - -	1823	420	3,967	Danville,
Henry, - -	1821	440	6,498	Newcastle,
Huntington, -	1832	400	—	—
Jackson, - -	1815	500	4,894	Brownstown,
Jefferson, - -	1809	400	11,465	Madison,
Jennings, - -	1816	400	3,950	Vernon,
Johnson, - -	1822	300	4,130	Franklin,
Knox, - -	1802	540	6,557	Vincennes,
La Porte, - -	1832	420	—	La Porte,
La Grange, - -	1832	380	—	Mongoquinon,
Lawrence, - -	1818	460	9,237	Bedford,
Madison, - -	1823	420	2,442	Andersontown,
Marion, - -	1821	440	8,181	INDIANAPOLIS,
Martin, - -	1818	340	2,010	Mount Pleasant.

COUNTIES.	Date of Formation.	Square Miles.	Population in 1830.	SEATS OF JUSTICE.
Miami, - -	1832	330	—	Miamisport,
Monroe, - -	1818	560	6,758	Bloomington,
Montgomery, -	1822	500	7,376	Crawfordsville,
Morgan, - -	1821	530	5,579	Martinsville,
Orange, - -	1815	378	7,909	Paoli,
Owen, - -	1818	380	4,060	Spencer,
Parke, - -	1821	450	7,534	Rockville,
Perry, - -	1814	400	3,378	Rome,
Pike, - -	1816	430	2,464	Petersburg,
Posey, - -	1814	500	6,883	Mount Vernon,
Putnam, - -	1821	490	8,195	Greencastle,
Randolph, - -	1818	440	3,912	Winchester,
Ripley, - -	1818	400	3,957	Versailles,
Rush, - -	1821	400	9,918	Rushville,
Scott, - -	1817	200	3,097	Lexington,
Shelby, - -	1821	430	6,294	Shelbyville,
Spencer, - -	1818	400	3,187	Rockport,
St. Joseph, -	1830	740	287	South Bend,
Sullivan, - -	1816	430	4,696	Merom,
Switzerland, -	1814	300	7,111	Vevay,
Tippecanoe, -	1826	500	7,161	Lafayette,
Union, - -	1821	224	7,957	Liberty,
Vandeburgh, -	1818	225	2,610	Evansville,
Vermillion, -	1823	280	5,706	New Port,
Vigo, - -	1818	400	5,737	Terre Haute,
Wabash, - -	1832	330	—	
Warren, - -	1828	350	2,854	Williamsport,
Warrick, - -	1813	412	2,973	Boonville,
Washington, -	1813	550	13,072	Salem,
Wayne, - -	1810	420	23,344	Centreville.

The total population in 1830, was 343,031. The estimated population in the message of Gov. Noble to the Legislature, December, 1835, was 600,000.

The counties in which the population has not been

given in the foregoing table, have been formed since 1830. Probably other new counties, along the waters of the Wabash and Kankakee, have been formed recently, of which no intelligence has yet reached us.

NOTE.—For the want of space, we have omitted the names of townships.

Q. What are the boundaries, &c. of Allen county?

A. Allen county, Indiana, bounded E. by Paulding county, Ohio; it lies to the N. E. from Huntington county, Indiana. To the W., N. and S. the bounding counties uncertain. It is a square of 26 miles each side.

A canal to cross this county, and to unite the navigable waters of Maumee and Wabash is in actual progress.

The streams are St. Joseph's and St. Mary's, which form the Maumee of Lake Erie, navigable for small keel boats—and numerous creeks.

It is generally heavy timbered; the soil is clay;—sandy on the rivers.*

Q. What are the boundaries, &c. of Bartholomew county?

A. Bartholomew county, of Indiana, bounded by Johnson N. W., Shelby N. E., Decatur E., Jennings, S. E., Jackson S., Monroe W. Length 24 miles; mean width 20. The slope of this county is nearly southward.

Streams—Driftwood, Clifty, Flat Rock, and Salt Creeks—all mill streams. Surface level; soil, a rich loam, mixed with sand and gravel; the western part hilly, with clay soil. Minerals, limestone, coal, iron ore, red ochre.

Q. What are the boundaries, &c. of Boone county?

A. Boone county, of Indiana, bounded S. by Hendricks, W. by Montgomery, N. by Clinton, E. by Hamilton, and S. E. by Marion. Length 26, breadth 20 miles. The slope is westward, and drained in that direction by Sugar and

* For seats of justice see table page.

Raccoon creeks, and other streams flowing into Wabash river. Surface level, and soil rich.

Q. What are the boundaries, &c. of Carroll county?

A. Carroll is bounded on the E. by Cass and Miami, on the S. and S. W. by Clinton and Tippecanoe, and on the N. and N. W. by counties unknown.

Streams—Wabash river, Deer, Rock, and branches of Wildcat creeks. Considerable timber, some prairies, of which Deer prairie is the largest and most beautiful. Considerable quantities of limestone on the surface; a remarkable spring near Delphi—the water reddish.

Q. What are the boundaries, &c. of Cass county?

A. Cass county, Indiana, bounded E. by Miami county, S. W. by Carroll county, on other sides boundaries uncertain. As laid down in Tanner's improved map of the United States, it is in length 24 miles from east to west; mean breadth 18 miles. Slope very nearly due west. The main stream of Wabash receives Eel river, from the right at Logansport, the seat of justice of this county, the village standing on the point between the two rivers.

Logansport is the head of steamboat navigation of the Wabash, and termination of the west and east canal. Surface generally level, rolling towards the rivers with abrupt bluffs; soil, near the rivers, a mixture of loam and sand; at a distance from them, fiat and clayey. Large proportion forest land; some prairies.

Q. What are the boundaries, &c. of Clark county?

A. Clark county, Indiana, bounded by Floyd S. W., Washington W., Scott N., Jefferson N. E.; Ohio river separating it from Oldham county, Kentucky, E. and S. E., and from Jefferson county, Kentucky, S. The slope of this county is almost directly south towards Ohio river. Silver creek rises in Clark, and flowing south, falls into Ohio river, at the lower end of the rapids at Louisville.

Surface, rolling and hilly; soil, loam, mixed with sand. Minerals, limestone, gypsum, water lime, marble, salt, iron ore, copperas, alum.

Q. What are the boundaries, &c. of Clay county?

A. Clay county, of Indiana, bounded S. W. by Sullivan, W. and N. W. by Vigo, N. by Parke, N. E. by Putnam, E. and S. E. by Owen, and S. by Greene. Length from south to north, 30 miles, mean breadth 12. Slopes to the southward, and is drained by Eel river, a branch of the west fork of White river. Creeks flowing westward into the Wabash river, rise along the western border of Clay, but the body of the county is in the valley of Eel river.

The surface of this county is moderately undulating; soil various, but chiefly clay and loam, and a mixture of sand, in some places predominates; but there are some prairies.

Q. What are the boundaries, &c. of Clinton county?

A. Clinton county, of Indiana, bounded by Boone S., Tippecanoe W., Carroll N. W., Miami N. E., and Hamilton county S. E. Length from east to west 24 miles; breadth 15. The slope of this county is nearly due west, and drained by the eastern branches of Wild Cat river, towards the more considerable stream of the Wabash.

The surface of this county is gently undulating, or level. Twelve Mile prairie extends from south-west to north-east, 12 miles, and is three-fourths of a mile wide. The remainder is timbered land. The soil, a rich sandy loam, and exceedingly fertile.

Q. What are the boundaries, &c. of Crawford county?

A. Crawford county, of Indiana, bounded by Perry S. W., Dubois N. W., Orange N., Washington N. E., Harrison E., and Ohio river, separating it from Meade county, Kentucky, S. Length 24, mean breadth 14 miles. The

slope is to the south, and towards Ohio river. The surface very broken.

The waters of Crawford county are the Ohio and Blue rivers, plenty of water power, and excellent springs. Surface hilly and broken; in places tolerably productive; in others, soil thin and rocky. It is a timbered region; and abundance of limestone.

Q. What are the boundaries, &c. of Daviess county?

A. It is bounded on the north by Green, on the east by Martin, on the south by Dubois, and Pike, and on the west by Knox counties. Its streams are Forks and White river, with its tributaries, Smother's, Prairie, Veal, Aikman's, and Sugar creeks. Level bottoms on the rivers: sometimes inundated; undulating on the high grounds. Soil on the west Fork, sandy; much timber; an extensive tract of sugar tree; some prairies. The county is destitute of rock near the surface. Plenty of lime and sandstone in the bed of West Fork of White river, at the rapids; plenty of coal.

Q. What are the boundaries &c. of Dearborn county?

A. Dearborn county, Indiana, bounded by Switzerland county S., Ripley W., and Franklin N.; again on the N. E. it is bounded by Hamilton county, Ohio, and on the S. E. by the Ohio river, separating it from Boone county, Kentucky. Length 27, mean breadth 15 miles. The slope of this county is rather east of southeast, towards the Miami and Ohio rivers.

This county is watered by the Great Miami, White-water, Loughery, Hogan's and Farmer's creeks. The surface is hilly and broken, with rich, level bottom lands, on the Miami. Soil, one-fourth first rate, one-fourth second rate, remainder inferior. It is a timbered region.

Q. What are the boundaries, &c. of Decatur county?

A. Decatur county, Indiana, bounded S. E. by Ripley, S. by Jennings, S. W. by Bartholomew, N. W. by Shelby,

N. by Rush, and N. E. by Franklin. Length diagonally from south-west to north-east 30 miles, mean breadth 10.

Flat Rock, Clifty, and Sand creeks, are all good mill streams. Surface, generally level—some parts undulating; soil, loam, with a substratum of clay; well adapted to grain—timbered. Minerals, limestone, some iron ore and coal.

A slip along the east border gives source to Loughery's creek, flowing south-east, over Ripley and Switzerland counties, into the Ohio, and to Salt creek, entering White Water branch of Great Miami; but the body of the county declines to the south-west, and is drained in that direction by Sand, Clifty, and Flat Rock creeks, flowing into the East Fork of White river.

Q. What are the boundaries, &c. of Delaware county?

A. Delaware county is bounded N. by Grant and Adams, on the E. by Randolph, on the S. by Henry, and on the W. by Harrison and the southern part of Grant county. It is nearly 22 miles long by 20 broad.

The Mississinawa and White rivers rising in Randolph, traverse Delaware in which they diverge; the former to the north-west, the latter to the west. Surface, tolerably level; soil, loam, mixed with sand. Minerals, some limestone, and granite bowlders scattered over the surface.

Q. What are the boundaries, &c. of Dubois county?

A. Dubois county, of Indiana, bounded N. E. by Martin and the south-west part of Orange, E. by Crawford, S. E. by Perry, S. by Spencer, W. by Pike, and N. W. and N. by the East Fork of White river, separating it from Daviess. Length 24 miles, mean breadth 20. Though this county bounds on the East Fork of White river, the far greater part of the surface is drained by the Patoka and confluent creeks, and slopes westward. Surface rolling; some parts hilly and broken,—some level tracts; soil rich,

and sandy loam near the streams. Minerals, sand rock and coal.

Q. What are the boundaries &c. of Elkhart county?

A. Elkhart county, of Indiana, bounded by La Grange county, E., the Putawatomie territory S. E. and S., St. Joseph's county W., Berrien county of Michigan N. W., and Cass county of Michigan, N. E. Length from south to north 26 miles, breadth 20. The south-western angle gives source to the Kankakee branch of Illinois, and declines westward, The northern part also declines westward, but is traversed in that direction by the main volume of St. Joseph river. Elkhart river, from which the county derives its name, enters the southeastern angle, and flowing N. N. W. falling into St. Joseph river, and receiving confluent from both sides, gives a slope in that direction to the body of the county. Surface, generally level—a portion undulating; soil various, but generally rich; forest and prairie, both wet and dry.

Q. What are the boundaries, &c. of Fayette county?

A. Fayette county, of Indiana, bounded by Franklin S., Rush W., Henry N. W., Wayne N. E., and Union E. Length from south to north, 18 miles, mean breadth 10. This county is traversed by the main stream, and is chiefly comprised in the valley of White river. It is also watered by a small lake in the north. Surface undulating; soil on the high ground clayey, and a mixture of sand; on the bottom lands, a rich, sandy loam. Limestone found in masses and quarries.

Q. What are the boundaries, &c. of Floyd county?

Floyd county, of Indiana, bounded by Harrison S. S. W. and W., Washington, N. W., Clark N. E. and E., and the Ohio river separating it from Jefferson county, Kentucky S. E. Length 20 miles, mean breadth 15. This county lies directly opposite Louisville in Kentucky. The slope is southward. It is watered by the Ohio river, Sil-

ver creek, and some head branches of Big and Little Indian creeks. Surface various—a range of knobs: east of these knobs, it is gently undulating; soil inferior. Minerals, shale, soft sandstone, limestone, freestone, iron ore, and some traces of coal. A boiling spring is also found in this county, from which is emitted an inflammable gas.

Q. What are the boundaries, &c. of Fountain county?

A. Fountain county, of Indiana, bounded by Tippecanoe on the N. E., Montgomery E., Parke S., Wabash river separating it from Vermillion, S. W., and Wabash river again separating it from Warren W. and N. W. Greatest length along the eastern border 30, mean breadth 16 miles. Slope southwestward towards the Wabash. It is watered by the Wabash river, and Coal and Shawnee creeks, with numerous mill sites, the water power in some places being of a superior character. Surface gently undulating; soil, a black loam, mixed with sand, and exceedingly rich. Minerals, coal and some sandstone.

Q. What are the boundaries, &c. of Franklin county?

A. Franklin county is bounded by Dearborn S., Ripley S. W., Decatur W., Rush N. W., Fayette and Union N., and Butler county of Ohio E. Length nearly 24, breadth 21 miles. This county is almost entirely comprised in the valley of White Water river, the main volume of which traverses it from northwest to southeast. The surface rather hilly. The soil in the central and northern parts is black loam; in the southwest thin and clayey.

Q. What are the boundaries, &c. of Gibson county?

A. Gibson county is bounded N. by White river, separating it from Knox county; N. E. and E. by Pike; S. E. by Warrick; S. by Vanderburg; S. W. by Posey, and W. and N. W. by Wabash river, separating it from Wabash county, Illinois. Greatest length from east to west

38 miles, mean breadth 16. Slope of the northern and western section very nearly due west, and in that direction the northern part is traversed by Patoka river. The southeastern angle gives source to Great Pigeon creek, a confluent of Ohio river, and declines southwardly towards that comparatively large recipient. The surface is rolling and timbered; soil generally a sandy loam, and productive.

Q. What are the boundaries, &c. of Grant county?

A. Grant county is bounded N. W. by Miami county, N. by Wabash and Huntingdon counties, S. E. by Delaware county, and S. by Madison. Breadth 18 miles, mean length 20. The Mississinawa river enters near the southern, and leaves it at the northwestern angle, flowing to the N. W., the general slope of the county being in that direction. The extreme northern sources of White river are, however, in the southwestern angle of this county, and flow to the southwest, and from the opposite angle issues a branch of Salamanic river, flowing to the northwest. The surface is level; generally heavily timbered. Soil, clay and loam on the table lands, sandy on the river bottoms.

Q. What are the boundaries, &c. of Greene county?

A. Greene county is bounded by Daviess S., Knox S. W., Sullivan W., Clay N. W., Owen N. E., Monroe E., and Lawrence S. E. It is a parellelogram. Length 30 miles from east to west, breadth 18. Slope a little west of south, and in that direction traversed, and nearly equally divided by the main stream of the Western Fork of White river. Its streams are White and Eel rivers, and Richland creek. Soil on the rivers is a rich loam; on the bluffs, sandy. East side is hilly and west side level. White river is navigable. Minerals, lime, sandstone, coal, and some iron ore.

Q. What are the boundaries, &c. of Hamilton county?

A. Hamilton county is bounded S. E. by Hancock, S. by Marion, W. by Boone, N. by Miamis and E. by Madison. It is a square of 21 miles, each way. Slope southwest, and in that direction is traversed by the main stream of White river, and also by Cicere, Coal, Stoney, and Fall creeks. This county is as yet almost entirely forest; some few prairies; soil in some places clayey, but more generally a sandy loam. Minerals, lime and some soft sand rock.

Q. What are the boundaries, &c. of Hancock county?

A. Hancock county is bounded by Rush southeast, Shelby south, Marion west, Hamilton northwest, Madison north, and Henry northeast. Length 20, mean breadth 18 miles. Slope southward, and in that direction drained by the northwestern sources of the Driftwood fork of White river.

Watered by Blue river, Sugar and Brandywine creeks, with excellent mill sites, and well supplied with springs. Surface, either level or gently undulating; soil, a rich loam, mixed with sand, heavily timbered.

Q. What are the boundaries, &c. of Harrison county?

A. Harrison county is bounded by Crawford northwest, Washington north, Floyd northeast, Ohio river separating it from Jefferson county, Kentucky, east; and Ohio river separating it from Meade county, Kentucky, south and southwest. Slope southwest towards, and at right angles nearly to, that part of Ohio river between Otter creek of Kentucky, and Blue river of Indiana.

Harrison county is watered by Big and Little Indian, and Buck creeks, and Blue river. Surface various,—some parts hilly and broken,—some parts undulating,—some parts level; soil in the low grounds, a rich loam,—on the high grounds, calcareous and gravelly. A large

tract of "barrens" in the west. Minerals; a quarry and several caves of black flint, salt licks, and limestone.

Q. What are the boundaries, &c. of Hendricks county?

A. Hendricks county is bounded south by Morgan, W. by Putnam, northwest by Montgomery, north by Boone, and east by Marion. It is a square of 21 miles each way.

The waters are White Lick, and branches of Eel river, with good mill sites. Surface gently rolling, and timbered with the varieties of the Wabash country; soil, a mixture of clay, loam, and sand.

Q. What are the boundaries, &c. of Henry county?

A. Henry county is bounded north by Delaware, on the east by Wayne and Randolph, on the south by Fayette and Rush, and on the west by Hancock and Madison.

Henry county is watered by Blue river, Flat Rock and Fall creeks. Surface in some places, broken,—in most parts, level; soil, a mixture of sand with loam and clay. Plenty of springs and mill sites. Mostly timbered, but several tracts of prairie.

Q. Can you describe Huntington county?

A. Huntington is bounded by Grant county southwest, Wabash county west, and on the other sides boundaries uncertain. Length from south to north 24 miles, breadth fifteen.

The general slope of this county is westward, though the Salamanic and Wabash proper traverse it in a northwest direction, but the latter receives near the centre of the county Little river from Allen county, flowing from the northwest, and some smaller confluent from the north. Below the junction of the Wabash and Little river, the united streams fall over rapids, at the foot of which the river becomes navigable. The centre of this county is about 90 miles N. northeast from Indianapolis. Surface, on the rivers, level,—back, gently undulating;

soil loam and clay, with a slight mixture of sand. There are several tracts of prairie, but it is generally forest land.

Q. What are the boundaries, &c. of Jackson county?

A. Jackson county is bounded southeast by Scott, south by the south branch of White river, separating it from Washington; west by Lawrence, north by Bartholomew, and east by Jennings. Length 30 miles, mean breadth, twenty.

Slope southwest, and traversed by Driftwood, Indian, White, Muscatatack, and Gum creeks. Surface rolling, and in places hilly; soil clay and loam, mixed with sand. In the forks of the creeks, sand predominates. On the west and northwest inclined to clay.

Q. What are the boundaries, &c. of Jefferson county?

A. Jefferson county is bounded by Ohio river, separating it from Gallatin county Kentucky, southeast; Clarke southwest; Jennings northwest; Ripley north; and Switzerland northeast. Length 25 miles, mean breadth, fifteen.

The features of this county are remarkable; though bounded by the Ohio river, it is drained almost from the margin of that stream by creeks, which flow directly from it into the valley of White river, namely, Indian, Kentucky, and Big creeks. Surface is various; along the river and creeks, it is low alluvion soil, loam mixed with sand. The bottoms are bounded by precipitous bluffs, with towering cliffs of limestone. The table lands are undulating, and the soil inclined to clay. Timber various. It abounds with limestone, masses of freestone, and scattered granite boulders.

Q. What are the boundaries, &c. of Jennings county?

A. Jennings is bounded by Jefferson county south, Scott west, Jackson northwest, Bartholomew northwest, Decatur north, and Ripley northeast. Length 26 miles.

mean breadth 20. Slope southwest. Drained by Graham's Fork, and the North Fork of the Muscatatack.

Surface in some parts level, in others very hilly. Soil is calcareous, rich and productive. Timber of all varieties. It abounds with limestone.

Describe Johnson county.

Johnson county is bounded by Bartholomew south, Morgan west, Marion north, and Shelby east. Length 22 miles, breadth 18.

It is watered on the eastern side by Blue river, and Sugar and Young's creeks; on the western side by Indiana, Crooked and Scott's creeks. Surface is gently undulating; soil a rich, black, sandy loam; well timbered. Minerals; masses of freestone, and scattered granite bowlders.

Describe Knox county.

Knox county occupies the lower part of the peninsula between the Wabash and White rivers, opposite Wabash and Lawrence counties, Illinois, and having Sullivan and Greene counties on the north. Extreme length, 50 miles, mean breadth 10. It has the Wabash on the west side, White river south, the West Fork of White river east, and Maria and Duchain in the interior. Surface undulating; soil, somewhat various,—a rich loam in places,—sandy in other places; some tracts of prairie, but timber predominates.

Describe La Porte county.

Laporte county is bounded north by the lake and state of Michigan, east by St. Joseph's county, south and west by the Indian country.

It is watered by the Kankakee, Galena, and Trail creeks, at the mouth of which is Michigan city, and a harbor for lake Michigan commerce. Surface, gently undulating; abounds with large, rich prairies, with groves of timber,

and lakes of clear water interspersed ; soil, a sandy loam, rich and productive.

Describe La Grange county.

La Grange is bounded by Elkhart county west ; St. Joseph's county, Michigan, northwest and north ; Branch county, Michigan, northeast ; other boundaries uncertain. Length from west to east 30 miles, mean breadth 18.

Slope northwest and west, and in that direction drained by Pigeon river and other confluent of St. Joseph's river of lake Michigan.

Surface is gently undulating. In the northern part are extensive prairies. The southern part is chiefly forest.—Soil is loam and sand.

Describe Lawrence county.

Lawrence county is bounded south by Orange, Martin southwest, Greene northwest, Monroe north, Jackson east, and Washington southeast. It is about 22 miles square. It is traversed from east to west by the main volume of the south fork of White river, and is watered by several creeks. Surface, generally hilly—some level lands ; soil, on the water courses, sandy—back from the streams, loam and clay. Limestone abundant.

Describe Madison county.

Madison county is bounded by Hancock south, Hamilton west, Grant north, Delaware northeast, and Henry southeast. Length 30 miles, breadth 18. Slope southwest, and drained by the main stream and various branches of White river.

The west fork of White river is navigable. The other streams are Killbuck, Pipe, Lick, and Fall creeks. Surface generally level, with some broken land near the streams ; timbered with a wet prairie, 7 miles long and $\frac{3}{4}$ of a miles wide, soil, sand mixed with clay and loam,

productive. Minerals; lime and freestone, marble that polishes well, and some traces of iron ore.

Describe Marion county.

Marion county is bounded by Johnson south, Morgan southwest, Hendricks west, Boone northwest, Hamilton north, and Hancock east. It is a square of 20 miles each way.

This county is traversed in a direction of south-south-west by the main stream of White river, which divides it into two not very unequal sections. The surface, every thing considered, is, perhaps, unsurpassed. Fall creek is an excellent mill stream. The soil is a deep black loam with a mixture of sand. Large granite bowlders are scattered over the surface.

Describe Martin county.

Martin county is bounded on the north by Greene, east by Lawrence and Orange, south by Dubois, and west by Daviess. The east fork of White river passes through it, and receives Lost river from the left, and Indian and Flint creeks from the right. The surface on the east side of White river is broken and hilly; the soil clay and loam. On the west side, it is level, or gently undulating, with portions of barrens and prairie land; soil, clay and loam, mixed with sand. Minerals: coal in large quantities, lime, sand, and freestone.

Describe Miami county.

Miami county is bounded northeast by Wabash county, southeast by Grant; Miami's territory south, Cass county west, and to the north uncertain. Length from south to north 30 miles, mean breadth 10.

Slope to the west, and in that direction it is traversed by the main Wabash in the centre, by the Mississinawa to the south, and Eel river to the north. These rivers unite near its western border at Miamisport.

The Wabash and Erie canal passes through this county.

Surface gently undulating and beautiful,—chiefly forest, and interspersed with small prairies; soil, the richest in the state, of loam, clay, and sand intermixed.

Describe the boundaries, etc. of Monroe county.

Monroe county is bounded by Lawrence S., Greene southwest, Owen northwest, Morgan north, and east by counties uncertain. Length 24 miles, mean breadth 20.

The northern part slopes westward, and is drained by Bean Blossom creek, a branch of White river, and the southern section slopes to the southward and is drained by Salt creek, a branch of the south fork of White river. The waters of this county are pure springs. The surface is hilly and undulating; soil, second rate. The minerals are limestone rock, and salt licks, with manufactories of salt.

Describe Montgomery county.

Montgomery county is bounded by Putnam south, Parke southwest, Tippecanoe north, Boon east, and Hendricks southeast. Length 24 miles, breadth 21. Slope to the southwest, and in that direction is traversed by Sugar and Raccoon creeks, branches of Wabash river.

The surface of this county is gently undulating; the northern portion prairie, interspersed with groves, with a rich soil of black loam, mixed with sand; the middle and southern portions are timbered. Excellent quarries of rock in the middle, granite boulders in the northern parts.

Describe Morgan county.

Morgan county is bounded by Monroe south, Owen southwest, Putnam northwest, Hendricks north, Marion northeast, and Johnson east. Length 26 miles, breadth, twenty-one.

This county approaching very nearly to a square, is entered near the northeastern angle by the main stream of White river, which crossing diagonally, leaves it at the

southwestern angle, after having divided it into two not very unequal sections.

The mill streams are White Lick, Sycamore, Highland, and Lamb's creeks on the west side, and Crooked, Stott's, Clear, and Indian creeks on the east side. Surface, generally rolling,—some parts hilly; soil, calcerous and clayey—on the bottoms, a rich sandy loam. Minerals, limestone, and some iron ore.

Describe the boundaries, etc. of Orange county.

Orange county is bounded south by Crawford, southwest by Dubois, northwest by Martin, north by Lawrence, and east by Washington. It is a square of 21 miles each way.

Streams: Lost river, French Lick, and Patoka. Surface, hilly and broken,—limestone rock,—springs of water, of which Half moon and French Lick are curiosities. On the alluvial bottoms, the soil is loamy,—on the hills, calcareous, and inclined to clay. Excellent stones for grit, equal to the Turkey oil stones, are found in this county.

Describe the boundaries, etc. of Owen county.

Owen county is bounded by Dubois south, Daviess west, north by Martin, and by Lawrence and Orange east. It is twenty-four miles in length, and eighteen in breadth.

Owen county is watered by the west fork of White river, with its tributaries, Raccoon, Indian, Mill, Rattlesnake, and Fish creeks. The Falls of Eel river furnish the best water power in the state.

Surface rolling; soil, in some places, a dark loam, in others clayey and calcareous. Minerals: immense bodies of lime rock, and some iron ore.

Q. What are the boundaries, &c. of Parke county?

A. Parke county is bounded on the north by Fountain and Montgomery, east and southeast by Putnam, south by Vigo and Clay, and west by Vermillion. Length and breadth nearly 27 miles each.

It is watered by the Big and Little Raccoon and Sugar creeks, (with excellent mill seats,) all of which enter the Wabash on its western side. Surface is generally level. There are some beautiful quarries, but more forest land. The soil is a loam mixed with sand, and is extremely rich. The minerals are lime and sandstone, coal and iron ore.

Q. What are the boundaries, &c. of Perry county?

A. Perry county is bounded west by Spencer, northwest by Dubois, north by Crawford, and by the Ohio river, separating it from Meade county, Kentucky, east; Breckenridge county, Kentucky, south, and Hancock county, Kentucky, southwest. Length from south to north 30 miles, mean breadth 15. Slope southward towards Ohio river. The surface is very broken, as it comprises a part of the great buttress of Ohio river, and reaches west to the dividing ridge between that stream and White river.

The interior is watered by Anderson's, Bear, Poison, and Oil creeks. All the high lands have a clayey, sterile soil; the level land has a rich sandy loam. The minerals are immense bodies of limestone, grindstone quarries, iron ore and coal.

Q. What are the boundaries, &c. of Pike county?

A. Pike county is bounded by Warrick south, Gibson west, White river separating it from Knox northwest, the eastern branch of White river separating it from Daviess northeast, and by Dubois county east; mean length from south to north 22 miles, mean breadth 18. The slope of this county is very nearly due west, and in that direction

is traversed by Patoka river. The course also of both branches of White river, where they bound the county, is also to the west. Patoka creek passes through the centre. The surface is all forest land and undulating; the soil in the eastern part is clay and sand, in the western a rich, dark loam, mixed with sand; there is some swampy land. Minerals are limestone and coal.

Q. What are the boundaries, &c. of Posey county?

A. Posey county is bounded north by Gibson, east by Vanderburg, Ohio river south, separating it from Henderson and Union counties, Kentucky, by Wabash river separating it from Gallatin county, Illinois, southwest, and White county, Illinois, west. Greatest length from south to north, 32 miles; mean breadth 16. Though bordered on the southward by Ohio river, the slope of Posey county is westward towards the Wabash river.

In the interior, are Big, Mill, and M'Fadden's creeks. The surface is rolling, and all forest land. The soil is sandy loam, and produces luxuriantly. The minerals, are limestone and coal.

Q. What are the boundaries, &c. of Putnam county?

A. Putnam county is bounded by Owen south, Clay southwest, Parke west and northwest, Montgomery north, Hendricks northeast and east, and Morgan southeast. Length 30 miles, breadth 20. Raccoon creek, a branch flowing southwest over the northwestern angle, flows thence over Parke into Wabash; but the much larger section inclines to the south-southwest, and is in that direction drained by the higher constituents of Eel river, branch of the north fork of White river.

The surface is gently undulating; soil in some places calcareous and clayey, and in others a rich loam. Limestone abounds in this county.

Q. What are the boundaries, etc. of Randolph county?

A. Randolph county is bounded by Wayne south, Henry southwest, Delaware west and northwest, Adams north. Length 24, breadth 24 miles.

This county is a real table land, from which flow to the northwest the higher sources of Mississinawa, branch of Wabash; the extreme source of White river rises on the west border of Darke county, Ohio, and flowing westward traverses Randolph; and finally the whole southern side gives source to, and is drained by the extreme sources of White Water, branch of Great Miami.

The surface is either level or greatly undulating; and the soil a rich loam. In some places, however, it is marshy. There is a small quantity of limestone, with granite boulders.

Q. What are the boundaries, etc. of Ripley county?

A. Ripley county is bounded by Jefferson south, Jennings west, Decatur northwest, Franklin north, Dearborn east, and Switzerland southeast. Length 27 miles, mean breadth 16. The western part of this county gives source to the extreme eastern branches of the south fork of White river, and which flow westward; the residue is drained by Loughery and Graham's creek. Surface level, forest land; soil clay—in some parts inclined to sand, with limestone abundant.

Q. What are the boundaries, etc. of Rush county?

A. Rush county is bounded by Decatur south, Shelby southwest, Hancock northwest, Henry north, Fayette northeast, and Franklin southeast. Length from south to north 24 miles, breadth 20. Slope southwest, and drained by numerous branches of the Driftwood fork of White river. The branches are Big and Little Blue rivers, Big and Little Flat Rock, with excellent water power. The

surface is moderately rolling, and heavily timbered. The soil a loam or clay, with a slight mixture of sand.

Q. What are the boundaries, etc. of Scott county?

A. Scott county is bounded by Clark south, Washington west, Jackson northwest, Jennings north, and Jefferson northeast and east. Length 20 miles, mean width 10. Slope northwest by west, and in that direction drained by creeks, falling into Graham's Fork of White river.

The waters of this county are the tributaries of Muscatatack. The surface is generally rolling; some flat lands, inclining to marsh;—soil is clay. The minerals are limestone, iron ore, salt, sulphur, and copperas.

Q. What are the boundaries, etc. of Shelby county?

A. Shelby county is bounded southeast by Decatur, Bartholomew south, Johnson west, Marion northwest, Hancock north, and Rush east. Length from south to north, 24 miles, breadth 18. Slope south-southwest, and in that direction drained by different branches of Driftwood.fork of White river.

The names of the waters of this county are Big and Little Blue river, Brandywine, and Sugar creeks. They have good mill-seats. The surface is generally level, with forest land; the soil clay mixed with loam.

Q. What are the boundaries, etc. of Spencer county?

A. Spencer county is bounded west by Little Pigeon river, separating it from Warrick, Dubois north, Anderson's creek east, separating it from Perry, and the Ohio river separating it from Hancock county, Kentucky, southeast, Daviess county, Kentucky, south, and Henderson county, Kentucky, southwest. Length from south to north 32 miles, mean width 14. General slope is southward towards Ohio river.

It is generally forest land; the soil clay mixed with loam. The minerals are coal and lime, and sand-rock.

Q. What are the boundaries, etc. of St. Joseph's county?

A. St. Joseph's county is bounded on the east by Elkhart, on the north by Michigan territory, on the west by La Porte, on the south not known. Its rivers are St. Joseph's, Kankakee, and Bobango, with some small creeks. There are extensive marshes on the Kankakee, and near the south bend of the St. Joseph's. These marshes are of vegetable formation. The surface is in some parts level, in others gently undulating. The soil a loam,—in some places sand. The northwest part is chiefly prairies and barrens, including the large and fertile prairies of Portage and Terre Coupe. The northeastern are barrens; the southeastern forest. The minerals are granite boulders, and bog iron ore.

Q. What are the boundaries, etc. of Sullivan county?

A. Sullivan county is bounded on the north by Vigo, on the northeast by Clay, east by Greene, south by Knox, and west by Illinois or Wabash river. Beside the Wabash on its western boundary, there are Gurman's, Busaron, and Turtle creeks, in the interior. The surface is rolling. There are some quarries—but generally forest land; some barrens. The soil of a loam and sand. Minerals lime and sand-rock, and coal.

Q. What are the boundaries, etc. of Switzerland county?

A. It is bounded on the north by Ripley and Dearborn, on the east and south, bordering on Kentucky, from which it is divided by the Ohio river, and on the west by Jefferson. Beside the Ohio on the east and south, it has Plum, Indian, Bryant's, Turtle, and Grant's creeks, in the interior. The surface is various,—bottom lands level and rich; then a range of precipitous bluffs, with cliffs of limestone. The table land rolling, with a calcareous and clayey soil. At Vevay are extensive vineyards.

Q. What are the boundaries, etc. of Tippecanoe county?

A. Tippecanoe county is bounded northeast by Carroll,

Clinton east, Montgomery south, Fountain southwest, Warren west and northwest; northern boundaries uncertain. Length from south to north 24, breadth 21 miles. The main stream of the Wabash in a southwest direction traverses this county, leaving about one-third of the surface on the northwest or right side. The residue, on the left side of Wabash, slopes northward towards that river. The Wabash affords navigation,—and the other streams, namely, Wildcat, Wea, Burnett's, and Mill Branch creeks, most excellent mill sites. The surface is gently undulating—with extensive level tracts, and consists of one-half prairie, one-eighth barrens, and the remainder heavy forest land. The prairie soil is a rich, black loam—the barrens cold, wet clay; the forest is a very rich loam and sand.

Q. What are the boundaries, etc. of Union county?

A. Union, one of the eastern counties of Indiana, is bounded by Franklin south, Fayette west, Wayne north, Preble county, Ohio, northeast and east, and Butler county, Ohio, south. Length 14 miles, breadth 11. Slope southward, and traversed and drained by White Water river. Florman's, Riceland, and Silver creeks, tributaries of White Water river, all furnish excellent mill sites. The surface moderately rolling; the soil a dark loam.

Q. What are the boundaries, etc. of Vanderburg county?

A. Vanderburg county is bounded west by Posey, Gibson north, Warwick east, and the Ohio river south, separating it from Henderson county, Kentucky. Area 225 square miles. Slope southwestward, and drained into the Ohio and Wabash rivers. The surface very hilly, and quite rocky, but soil fertile. Minerals, lime and sandstone, salines, and a mineral spring.

Q. What are the boundaries, etc. of Vermillion county?

A. Vermillion county is bounded by Warren county north, Wabash river separating it from Fountain county

northeast, and Parke southeast; it has Vigo county south, Edgar county, Illinois, southwest, and Vermillion county, Illinois, northwest. Slope eastward towards Wabash river, and in that direction it is drained by Vermillion river, and numerous other streams. Length from south to north 38 miles, mean breadth 8. Surface high, rolling land, with abrupt bluffs near the streams; a good proportion of prairie and timber. Soil, rich, sandy loam, and very productive. Minerals, freestone and limestone, and large coal banks.

Q. What are the boundaries, etc. of Vigo county?

A. Vigo county is bounded by Vermillion county, Indiana, north, Parke northeast, Clay east, Sullivan south, Wabash river, separating it in part from Clarke county, Illinois, southwest. Length from south to north 26, breadth 18 miles. The northwestern part is traversed by the Wabash river; the general slope south-southwest.

The mill streams are Prairie, Honey, Otter, and Sugar creeks, but their waters fail in a dry season. Surface level, or gently undulating, with forest and prairies; soil, rich loam and sand—first rate. Minerals, gray limestone, freestone, and inexhaustible beds of coal.

Q. What are the boundaries, etc. of Wabash county?

A. Wabash county is bounded on the west by Miami, on the south by Miami and Grant, on the east by Huntington, north uncertain. The Wabash river, and West and East canal, pass through it, as does the Missisquoi, Eel, Bluegrass, and Salamanic. Surface, wide, rich bottoms on the streams,—bluffs and ravines adjoining—table lands further back, either dry and rolling, or flat and wet, and abound with willow swamps. Limestone rock abundant, and many excellent springs of pure water.

Q. What are the boundaries, etc. of Warren county?

A. Warren county is bounded by the Indian country northwest, Tippecanoe county northeast, Wabash river

separating it from Fountain southeast, Vermillion county southwest, and Vermillion county, Illinois, west. Greatest length, as laid down by Tanner, 26 miles, mean breadth 18. The slope of this county is to the southeast towards the Wabash.

On the southeast border, the Wabash for thirty miles is navigable for steamboats. The interior streams are Rock, Redwood, and Big and Little Pine creeks; all of which afford good mill sites. There are some pine and cedar timber. The surface is generally level, with broken land on the bluffs of creeks;—some forest, but the largest proportion prairie. The soil, a rich and very fertile loam. The minerals are lime and excellent freestone for building purposes, coal, iron, lead and copper, with several old “diggings,” and furnaces, where both copper and lead ore have been smelted in early times.

Q. What are the boundaries &c. of Warrick county?

A. Warrick county is bounded by Vanderburg west, Gibson northwest, Pike north, Dubois northeast, Spencer east and southeast, and Ohio river separating it from Henderson county, Kentucky, south. Length 25 miles, mean width 13. The northern boundary of this county is on the table land between the valleys of Ohio river and the Patoka, a branch of the Wabash; but nearly the whole of its surface slopes southwardly towards the former river. Surface hilly, but soil productive. The minerals are quarries of freestone, some limestone, and inexhaustible beds of coal.

Q. What are the boundaries, &c. of Washington county?

A. Washington county is bounded south by Harrison, southwest by Crawford, west by Orange, northwest by Lawrence, north by the East Fork of White river, separating it from Jackson, northeast by Scott, east by Clark, and southeast by Floyd. Length from east to west 26 miles, mean breadth 20.

This county extends southwardly from the bank of the East Branch of White river, over the table land between that stream and the Ohio river. Blue river, a small confluent of the Ohio, rises in and drains the southern part, whilst from the western flow small creeks into the East Fork of White river. Surface broken, hilly, and soil fertile. Substratums of limestone, caves, hollows, and sink-holes.

Q. What are the boundaries, &c. of Wayne county?

A. Wayne county is bounded south by Union, Fayette southwest, Henry west, Randolph north, Darke county, Ohio, northeast, and Preble county, Ohio, southeast. It is very near a square of 20 miles. Slope southward, and drained by the higher branches of White Water river, a confluent of Great Miami river. The surface is moderately hilly, with heavy forest land; the soil a rich loam. Minerals, generally limestone, which is excellent for buildings.

Describe the Chief Towns of Indiana.

The tabular view of county towns presents the names of the most considerable villages in this state. To mention, in detail, all that have really attained some degree of consequence, would only furnish a barren catalogue of names. We will therefore only mention the chief of those on the Ohio, in descending order, beginning with Lawrenceburgh, on the southeastern angle of the state.

LAWRENCEBURGH is the seat of justice for the county of Dearborne, it stands on the north bank of the Ohio, 23 miles below Cincinnati, and two miles below the Big Miami, the eastern limit of the state. It is in the centre of a rich bottom. The ancient village was built on the first bottom, which was frequently exposed to inundation. The floods, instead of creating disease, wash the surface of the earth, carry off vegetable and animal mat-

ter, and are supposed to be rather conducive to health than otherwise. The old town, built on the first bank, had been stationary for many years. New Lawrenceburgh has been recently built on the second bank, and on an elevated ground, formed by the bank of Tanner's creek. Since the commencement of this town, few places have made more rapid progress. Many of the new houses are handsome; and some of them make a handsome show from the river. It has a number of respectable commencing manufactories, and promises to be a large town. It contains 14,573 inhabitants.

AURORA, is a new village, at the mouth of Hogan creek, four miles below, on the Ohio. It contains between 60 and 70 dwellings.

Rising Sun, 13 miles below Lawrenceburgh, occupies a beautiful position on the Ohio, and is a village something larger than Aurora.

VEVAY, the seat of justice for Switzerland county, is situated eight miles above the Point, opposite the mouth of Kentucky river, and 45 miles below Cincinnati. It contains between 200 and 300 houses, a court house, jail, academy, printing offices, from which issues a weekly journal. A branch of the bank of Indiana, and some other public buildings. This interesting town was commenced in 1804, by thirty Swiss emigrants, to whom the United States made a grant, under favorable stipulations, of a considerable tract of land, to patronize the cultivation of the vine.

The patriarch of this colony was a Swiss gentleman of the name of J. J. Dufour, who continued an intelligent friend to the town. The colony soon received considerable accessions from the mountains of Switzerland.

Defour, Morerod, Bettens, Siebenthal, and others, commenced the cultivation of the grape on a large scale.

This cultivation has gone on, steadily increasing. An hundred experiments have been since commenced in different points of the west. But this still remains the largest vineyard in the United States. We have witnessed nothing in our country, in the department of gardening and cultivation, which can compare with the richness of this vineyard, in the autumn, when the clusters are in maturity. Language but feebly paints such a spectacle. The horn of plenty seems to have been emptied in the production of this rich fruit.

These amiable and industrious people are constantly profiting by experience. This species of agriculture already yields them a profit more than any other practised in our country. They are the simple and interesting inhabitants that we might expect, from the prepossessions of early reading, to find from the vine clad hills of Switzerland. They are mostly protestants, and happily compound the vivacity of the French with the industry of the Germans. Like the former, they love gaiety and dancing. Like the latter, they easily fall in with the spirit of our institutions, love our country and its laws, intermarry with our people, and are in all respects a most amiable people.

There is a number of professional men in Vevay, a public library, a literary society, and many of the comforts and improvements of a thriving town. Mr. Dufour has distinguished himself by agricultural productions, particularly on the culture of the vine. This industrious people have created some manufactures peculiar to themselves, particularly that of straw bonnets. The position of the town is fortunate, in relation to the back country, and the other interior large towns.

MADISON, the most populous, thriving, and one of the pleasantest towns in the state, is situated on the Ohio nearly equi-distant from Louisville and Cincinnati, and was commenced in 1811. In 1829 between forty and fifty brick buildings, many of them three stories high, were added to the town, and the promise of future progress is equally great.

It has 25 dry goods stores, many of them transacting extensive business. A line of stages passes through the town. It has two printing offices, and issues a respectable weekly gazette. It has an insurance company, and does a large business in exports of the produce of the country, and is particularly noted for the quantity of pork barrelled here. The town contains a population of 2,442 inhabitants.

JEFFERSONVILLE is situated just above the Falls of Ohio. The town of Louisville on the opposite shore, and the beautiful and rich country beyond, together with the broad and rapid river, forming whitening sheets and cascades from shore to shore, the display of steamboats, added to the high banks, the neat village, and the noble woods on the north bank, unite to render the scenery of this village uncommonly rich and beautiful. It is a considerable and handsome village, with some houses that have a show of magnificence. It has a land office, a post office, a printing office, and some other public buildings.

One of the principal *chutes* of the river in low water, is near this shore, and experienced pilots, appointed by the state, are always in readiness to conduct boats over the falls.

CLARKESVILLE is a small village, immediately below Jeffersonville.

NEW ALBANY is the seat of justice for Floyd county, and four and a half miles below Jeffersonville. The front street is three-quarters of a mile in length, and makes a respectable appearance from the river. It has a convenient ship yard for building steamboats, and is a thriving and busy village.

FREDONIA, *Leavenworth*, *Rockport*, and *Evansville*, occur as we descend the Ohio. The last is a village of some consequence. It is the landing place of emigrants descending the Ohio for the Wabash. It is at the mouth of Big Pigeon creek, 54 miles south of Vincennes, and 45 above the mouth of the Wabash. Being about half way between the falls of Ohio and the mouth, it is a noted stopping place for steamboats.

CORYDON, the seat of justice for the county of Harrison, was for a considerable time the political metropolis of the state. It is distant 23 miles from Jeffersonville, and 13 from the Ohio, and is situated in the forks of Indian creek. North of the town spreads an extensive region of barrens, full of sink holes and limestone caves.

SALEM, on a small branch of Blue river, 34 miles N. of Corydon, is a flourishing town, containing more than 100 houses.

BROWNSTOWN, PAOLI, and WASHINGTON, are inferior county towns.

The following towns occur on the Wabash, as we descend the river :

Frenchtown.—Above Tippecanoe is the old French town of Ouitanon, at the head of boatable navigation on the river, in the centre of what was recently the country of the savages. Its origin dates back nearly one hundred

years. The inhabitants are a mixture of French and Indian blood.

Merom is on a high bluff of the Wabash, opposite La Motte Prairie in Illinois, and is in the centre of rich and beautiful prairies. It has peopled with great rapidity.

Terre Haute is situated two miles below Fort Aarrison, as its name imports on a high bank of the Wabash. It is a growing and important village.

Shaker Town, 15 miles above Vincennes, contains a community of the industrious people called Shakers, and exhibits the marks of order and neatness, that characterize this people.

VINCENNES is, after Kaskaskia, the oldest place in the western world. It was settled in 1735 by French emigrants from Canada. They fixed themselves here in a beautiful, rich, and isolated spot in the midst of the deserts. For an age, they had little intercourse with any other people than savages. Their interests, pursuits, and feelings were identified with them. Their descendants are reclaimed from their savage propensities; and have the characteristic vivacity and politeness of the French people. It is 150 miles above the mouth of the Wabash; and 54 from the nearest point of the Ohio. It has improved rapidly of late, and contains 300 houses, a brick court house and hotel, a jail, a respectable building for an academy, a Roman Catholic and a Presbyterian church, land office, post office, two printing offices, from one of which is issued a respectable gazette, a bank, and some other public buildings, and 1500 inhabitants. It is situated contiguous to a beautiful prairie, 5000 acres of which are cultivated as a common field, after the ancient French customs. It was for a long time the seat of the territorial government, and still has as much trade as any

other place in the state. The plot of the town is level, and laid off with regularity. The houses have extensive gardens, crowded after the French fashion with fruit trees. It is accessible for the greater part of the year by steam boats; and is a place of extensive supply of merchandize to the interior of this state. Volney, who visited this place not long after the establishment of the Federal government, gives a graphic and faithful account of the appearance of this place, and the adjoining country, the French inhabitants, and their manners. At the same time he presents a revolting picture of the manner in which the Americans treated them. Perhaps he had not learned that Vincennes had been, for a long time, a nest of savages, from which they had fitted out their murderous expeditions; and that it was natural that the Kentuckians, who had suffered much from them, should retaliate upon the people who had harbored them. He represents them subsequently to have been cheated out of their lands by the Americans, and their ignorance so profound, that little more than half their number could read or write; and he avers that he could instantly distinguish them when mixed with the Americans, by their meagre and tanned faces, and their look of poverty and desolation. However just this picture may have been in 1796, it is reversed now. Most of the inhabitants have an air of ease and affluence; and Vincennes furnishes a pleasant and respectable society.

HARMONY is 54 miles below Vincennes, and something more than 100 by water above the mouth of the Wabash, on the east bank of the river, and 16 miles from the nearest point of the Ohio, on a rich and heavy timbered plateau, or second bottom. It is high, healthy, has a fertile soil, and is in the vicinity of small and rich prairies, and is a pleasant and well chosen position. It

was first settled in 1814 by a religious sect of Germans, denominated Harmonites. They were emigrants from Germany, and settled first on Beaver creek, in Pennsylvania. They moved in a body consisting of 800 souls, to this place. Their spiritual and temporal leader was Geo. Rapp, and all the lands and possessions were held in his name. Their society seems to have been an intermediate sect between the Shakers and Moravians. They held their property in common. Their regulations were extremely strict and severe. In their order, neatness, industry, and perfect subordination, they resembled the Shakers. They soon erected from 80 to 100 large and substantial buildings. Their lands are laid off with the most perfect regularity, and were as right angled and squared as compass could make them. They were wonderfully successful here, as they had been at other places, in converting a wilderness into a garden in a short time.—They had even the luxury of a botanic garden and a green house.

Their great house of assembly, with its wings and appendages, was nearly 100 feet square. Here they lived and labored in common, and in profound peace; but from some cause, their eyes were turned from the rich fields, and the wide prairies, and the more southern and temperate clime of the Wabash towards Beaver creek, the place where they had first settled. While they were under the influence of these yearnings, the leader of a new sect came upon them. This was no other than Robert Owen, of New Lanark, in Scotland, a professed philosopher of a new school, who advocated new principles, and took new views of society. He denominated his theory "the social system." He was opulent, and disposed to make a grand experiment of his principles on the prairies of the Wabash, and purchased the lands and village of Mr. Rapp for \$190,000. In a short time there were admitted to the

new establishment, from seven to eight hundred persons. They danced all together one night in every week, and had a concert in another. The Sabbath was occupied in the delivery and hearing of philosophical lectures. Two of Mr. Owen's sons and Mr. M'Clure joined him from Scotland. The society at New Harmony, as the place was called, excited a great deal of remark in every part of the United States. Great numbers of distinguished men in all the walks of life wrote to the society, making inquiries respecting its prospects and rules, and expressing a desire to join it at some future time. Mr. Owen remained at New Harmony a little more than one year, in which time he made a voyage to Europe. The 4th of July, 1826, he promulgated his famous declaration of mental independence. The society had begun to moulder before this time. He has left New Harmony, and the social system is abandoned. It is to be hoped that this beautiful village, which has been the theatre of such singular and opposite experiments will again flourish.

BROOKVILLE is a decaying village, in the Forks of the beautiful White Water. It was noted for the number and enterprise of its mechanics and manufactures. A number of its public and private buildings are of brick, and respectable. It has grist mills, saw mills, carding machines, a printing office, and numbers of the common mechanic shops, where the usual articles of city manufacture are made.

The surrounding country is finely timbered and watered. The soil is rich and productive; and has acquired reputation for the excellence of its tobacco. From some cause, notwithstanding all these advantages, it has declined. The number of houses exceeds one hundred.

HARRISON is situated on the north shore of White

Water, eight miles from its mouth, eighteen northeast of Brookville, and in the centre of an excellent body of land. The village is divided in its jurisdiction between Ohio and Indiana. In the rich and extensive bottoms that surround this village, are found great numbers of Indian mounds. They contain quantities of human bones, in all stages of decay. Indian axes, vases, implements of war and domestic use abound in them. In the bottom of most of them are found brands, coal and ashes; indications from which antiquarians have inferred, that they were places of sacrifice, and that the victims were human.

Richmond is a thriving town of 1,500 inhabitants.

INDIANAPOLIS is situated on the west bank of White river, in the centre of one of the most extensive and fertile bodies of land in the western world—nearly central to the state, and at a point accessible by steamboats in common stages of the Wabash. No river in America, according to its size and extent, waters greater bodies of land than White River. The country is settling about this town with unexampled rapidity. But a few years ago it was a solid and deep forest, where the surprised traveller now sees the buildings of a metropolis, compact streets, and squares of brick buildings, respectable public edifices, manufactories, mechanic shops, printing offices, business and bustle.

Such is the present aspect of Indianapolis, which contains two hundred houses, and 1200 inhabitants. It will probably become one of the largest towns between Cincinnati and Mississippi.

In the recently settled parts of the state, have sprung up a number of new towns, with compact streets and handsome houses, within four or five years. The most considerable of these are *Logansport*, *Terre Haute*,

Rockville, Crawfordsville and La Fayette. This last town is now the head of navigation on the Wabash.

At the point designated by the Commissioners for the termination of the Wabash and Erie canal, 66 miles below La Fayette, is the famous battle ground of Tippecanoe, at the mouth of that river. It exhibits the most beautiful scenery. The breast-works of the American army are still visible. The hottest point of the fight is indicated by the masses of bones of the horses that were killed. General Tipton, who at the age of eighteen years distinguished himself in that battle, is the present owner of the site, and has enclosed it with a view of consecrating the memory of that event.

Q. What are the Internal Improvements of Indiana?

A. This State has entered with great spirit upon a system of internal improvements. It consists of canalling, improving river navigation, rail-roads, and common turn-pike roads.

Give a brief description of the Canals and Railroads of Indiana.

Wabash and Erie Canal.—This work will extend from La Fayette, on the Wabash river, up the valley of that stream, to the Maumee, and to the boundary of the Ohio; distance 105 miles. The cost of construction has been estimated at \$1,081,970, and lands to the amount of 355,200 acres, have been appropriated by the general government, the proceeds of which will be sufficient to complete the canal to Fort Wayne. The middle division, 32 miles, was completed in July, 1835; and the remainder is in active progress. Its whole distance, through a part of Ohio to Maumee bay, at the west end of Lake Erie, will be 187 miles.

The *White Water Canal*, 76 miles in length, along the western branch of White Water, is intended to pass

through Connorsville, Brookville, Somerset, and other towns, to Lawrenceburgh, on the Ohio river.

Provision is made to improve the navigation of the Wabash river, in conjunction with Illinois, where it constitutes the boundary line, and, by this state alone, further up.

Rail-Roads.—From Evansville, on the Ohio, to La Fayette on the Wabash, 175 miles; from La Fayette to Michigan city, 90 miles; forming a line from the Ohio river to Lake Michigan, 265 miles in length;—from Madison, on the Ohio, to Indianapolis, the seat of government, 85 miles; and several others were projected two years since. But at the session of the legislature of 1835-6, a bill was passed to borrow, in such instalments as should be needed, *ten millions* of dollars; and a system of internal improvements, including canals, railroads, and the improvement of river navigation, was marked out. In a few years, this State will be prominent in this species of enterprise.

Synopsis of Canals surveyed by order of the Indiana Legislature during the Year 1835.

La Fayette and Terre Haute division of the Wabash and Erie canal. Length 90 miles; total cost \$1,067,914 70; per mile \$11,865 79.

Central canal, north of Indianapolis. Total length, from Indianapolis via Andersonstown, Pipe creek summit to the Wabash and Erie canal at Wabash town, 103 miles 34 chains; total cost \$1,992,224 54; per mile \$17,106 51. Length, via Pipe creek summit to Peru, near the mouth of the Mississinawa, 114 miles 46 chains; total cost \$1,897,797 19; per mile \$14,871 85. Length, via Pipe creek summit (including lateral canal to Muncietown) to Wabash town, 124 miles 51 chains; total cost \$2,103,153 61; per mile \$15,873 83. Length, via Pipe creek summit,

(including lateral canal to Muncietown) to Peru, 185 miles 63 chains; total cost \$2,008,726 26; per mile \$14,793 12. Total length, from Indianapolis via Muncietown to the Wabash and Erie canal, at Peru, 131 miles 41 chains; total cost \$2,058,929 41; per mile \$14,549 71.

Central canal, south of Indianapolis. Total length from Indianapolis to Evansville, 188 miles; total cost \$2,642,235 92; per mile \$14,054 71. Route down the valley of Main Pigeon. Length 194 miles; total cost \$2,400,957 70; per mile, \$12,376 02.

Terre Haute and Eel river canal, which forms a connexion between the Wabash and Erie canal and White river or Central canal. Total length $40\frac{1}{2}$ miles; total cost \$629,631 65; which, including a feeder, is \$13,540 46 per mile.

Wabash and Erie canal, eastern division, [east of Fort Wayne]. Upper line: Length, 19 miles 30 chains; total cost \$154,113 13; per mile, \$7,952 17.—Lower line: total length 20 miles $76\frac{1}{2}$ chains; total cost \$254,817 52; per mile \$11,153 04.

The following are the works provided for in the bill, and the sums appropriated for them:

1. The White Water canal, including a lateral canal or railroad, to connect said canal with the Central or White river canal,	\$1,400,000
2. Central or White river canal, - - -	3,000,000
3. Extension of the Wabash and Erie canal,	1,300,000
4. Madison and La Fayette railroad, - - -	1,300,000
5. A McAdamized turnpike road from New Albany to Vincennes, - - -	1,150,000
6. Turnpike or railroad from New Albany to Crawfordsville, - - -	1,300,000
7. Removing obstructions in the Wabash, - - -	50,000
	<hr/>
	\$10,000,000

The Bill gives the credit of the State to the Lawrenceburgh and Indianapolis Railroad Company, for the sum of 500,000 dollars.

Q. What is the state of Agriculture in Indiana?

A. It is improving rapidly, on account of the general character of its lands, and the industrious and enterprising habits of its inhabitants.

Q. What is the state of Commerce in Indiana?

A. Special authorities cannot be obtained on the subject, but it is fair and promising. The rapidly increasing value and importance of its lake advantages, already place it in an enviable light; and in a few more years we hope to see its commercial facilities put into full and efficient requisition. These bid fair to place Indiana high in the scale of commercial importance.

Q. What are the Manufactures of this State?

A. They differ little from those of Ohio.—*See Counties.*

Q. What is the state of Education in Indiana?

A. The same provision of one section of land in each township, or a thirty-sixth part of the public lands, has been made for the encouragement of common schools, as in other Western States. A law has been enacted, providing for common schools, and the public mind has become measurably awakened to the subject of education. Academies have been established in several counties, and a college at Bloomington, from the encouragement of State funds. Other institutions are rising up, of which the Hanover Institution near the Ohio river, and Wabash College at Crawfordsville, promise to be conspicuous.

Q. What are the Colleges of this State?

A. *Indiana College* is a State institution, established at Bloomington, and commenced operations in 1828.

Present number of students not known. In 1832 the number exceeded 50.

Hanover College is at South Hanover, six miles below the town of Madison, and near the Ohio river. It is a flourishing institution, with arrangements for manual labour, and is styled "South Hanover College and Indiana Theological Seminary."

There are but few academies as yet in this state, but there is much want of teachers felt—and the probability is, that soon Indiana will have her territory abundantly supplied with institutions of an enviable character, as several high schools are in contemplation in different parts of this rapidly advancing state.

A historical society has recently been formed—the object of which is, to investigate the antiquities of the country, and preserve the materials for the annals and history of the state. A respectable library has already been collected, and the society bids fair to be efficient in furnishing documents of practical utility in furthering its objects.

That spirit of regard for schools, religious societies and institutions connected with them, which has so honorably distinguished the commencing legislation of Ohio, has displayed itself in this state. There are districts, no doubt, where people have but just made beginnings, and are more anxious about carrying on the first operations of making a new establishment, than educating their children. But it ought to be recorded to the honour of the people, that among the first public works, in an incipient village, is a school-house, and among the first associations, that for establishing a school. Schools are established in all the considerable towns and villages in the state. In many of the more compact there is a reading room, and a social library. The spirit of enquiry,

resulting from our free institutions, is pervading the country; and a thirst for all kinds of information is universal. This state will soon take a high stand among her sister states, in point of population. It is hoped that her advancement in intellectual improvement, and social and religious institutions, will be in corresponding proportion.

Q. What is the religious character of Indiana?

A. From the following account it will be perceived that her spiritual guides are numerous, and the number of professing Christians extensive—which speak highly in praise of the religious character of its inhabitants:

The Baptists in this state have 11 associations, 181 churches, 127 ministers, and 6,513 communicants. The Methodists 34 preachers, and 13,794 members. The Presbyterians about 50 churches and 20 ministers.

Give a synopsis of the Finances of Indiana.

The Indiana Gazetteer of 1833 estimates that the revenue for state purposes amounted to about 35,000 dollars annually, and for county purposes to about half that sum. The aggregate receipts for 1835, according to the Governor's Message, of December, 1835, amounted to 107,714 dollars; expenditures for the same time, 103,901 dollars.

Sales of canal lands for the same period, 175,740 dollars. The Canal Commissioners have borrowed 605,257 dollars, for canal purposes, on a part of which they obtained two per cent. premium; and on another part, as high as seven per cent.;—and have also borrowed 450,000 dollars, bank capital, for which they received four and a-half per cent. premium. Three per cent. on all sales of the United States' lands, within the state, is paid by the general government into the State Treasury, to be expended in making roads. The receipts from this source in 1835, amounted to 24,393 dollars. Sales and rents of saline lands, produced an income of 4,636 dollars. The

proceeds of certain lands donated by the general government, towards the construction of a road from the Ohio river to Lake Michigan, amounted to 33,030 dollars.

Q. What can you say of the History of Indiana?

A. This country was first explored by adventurers from Canada, with a view to the Indian trade, towards the close of the seventeenth century; and the place where Vincennes now stands, is said to have been thus early occupied as a trading post. A company of French from Canada made a settlement here in 1735. The country, in common with the Western Valley, was claimed by France, until it was ceded to Great Britain, at the treaty of peace in 1763, under whose jurisdiction it remained, until subdued by the American arms under the intrepid Gen. G. R. Clark, and his gallant band, in 1779. A territorial government was organized by Congress in 1787, including all the country northwest of the river Ohio, which was then called the Northwestern Territory. In 1802, when the State of Ohio was organized, all that part of the Territory lying west of a line due north from the mouth of the Great Miami, was organized into the Territory of Indiana, which was divided, and from which Illinois Territory was formed in 1809. In June, 1816, a constitution was adopted, and at the ensuing session of Congress, Indiana was made a State.

In 1818, 8,500,000 acres of land were added to this state by a purchase from the Indians, lying in the northern section of the state. This purchase affords incalculable advantages to Indiana.

Table of Distances in Indiana.

	Miles,	Miles,		Miles,	Miles,
1. <i>From Indianapolis to Terre Haute.</i>					
To Belleville,	20		Perrysville,	15	112
Danville,	7	27	Covington,	7	119
Greencastle,	22	49	Portland,	7	126
Gallatin,	35	84	Attica,	7	133
Terre Haute,	12	96	Lafayette,	26	159
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2. <i>From Indianapolis to Madison.</i>			5. <i>From Louisville, Ken., to Orleans.</i>		
To Franklin,	20		New Albany, In.	4	
Edinburg,	12	32	Jeffersonville,	3	7
Columbus,	11	43	New Providence,	18	25
Geneva,	12	55	Salem,	17	42
Vernon,	11	66	Orleans,	20	62
Lancaster,	12	78	<hr/>		
Madison,	9	87	6. <i>From Richmond to Cincinnati.</i>		
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3. <i>From Louisville, Ken. to Vincennes.</i>			To Brownsville,	10	
To New Albany,	4		Liberty,	5	15
Greenville,	10	14	Dunlapsville,	5	20
Fredericksburg,	16	30	Fairfield,	7	27
Paoli,	17	47	Brookfield,	6	33
Hindustan,	24	71	New Trenton,	10	43
Mount Pleasant,	4	75	Harrison,	7	50
Washington,	16	91	Cheviot,	18	68
Berryville,	6	97	Cincinnati,	7	75
Vincennes,	14	111	<hr/>		
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4. <i>From Vincennes to Lafayette.</i>			7. <i>From Madison to Terre Haute.</i>		
To Carlisle,	19		To Lancaster,	9	
Merom,	14	33	Vernon,	12	21
Terre Haute,	32	65	Geneva,	11	32
Clinton,	15	80	Columbus,	12	44
Montezuma,	8	88	Bloomington,	35	79
Newport,	9	97	Bowling Green,	41	120
			Terre Haute,	24	144

8. <i>From Brookville to Centreville.</i>	Miles,	Miles,	11. <i>From Cincinnati to Indianapolis, via Brookville.</i>	Miles,	Miles,
To Blooming Grove	6	19	See Route No. 13, Ohio.		115
Connersville,	13	19			
Milton,	10	29			
Centreville,	10	39			
9. <i>From Vincennes to Evansville.</i>			12. <i>From Cincinnati to Indianapolis, via Lawrenceburgh.</i>		113
To Princeton,	26		See Route No. 14, Ohio,		
Sandersville,	17	43			
Evansville,	12	65			
10. <i>From Princeton to Mount Zion, Ky.</i>			13. <i>From Dayton to Indianapolis, via Centreville.</i>		111
To Owensville,	10		See Route No. 16, Ohio,		
Cynthiana,	6	16			
New Harmony,	14	30			
Mount Vernon,	15	45			
Mount Zion, Ken.,	25	70			

ILLINOIS.

Q. What are the boundaries, &c. of the State of Illinois?

A. Illinois is bounded by the Mississippi river west and southwest; by Huron territory north; lake Michigan northeast; Indiana east; and Ohio river, separating it from Kentucky southeast and south.

The outlines of the state are as follows: commencing at the junction of the Ohio and Mississippi river, and thence up the latter opposite the state of Missouri, to the mouth of Lemoine river, by comparative courses 340 miles; continuing up the Mississippi to Lat. $42^{\circ} 30'$, 200 miles; thence due east to lake Michigan along the south boundary of Huron, 167 miles; along the southwest part of lake Michigan 60 miles; thence due south along the western boundary of Indiana to Wabash river 163 miles; down the Wabash opposite Indiana to the Ohio river, 120 miles; down the Ohio river opposite Kentucky, to the Mississippi river, to the place of beginning, 130 miles; having an entire outline of 1,170 miles.

This state, next to Virginia and Missouri, is the third in area amongst the United States; it extends in latitude from 37° to $42^{\circ} 30'$, and in longitude from $10^{\circ} 36'$ to $14^{\circ} 30'$ west from Washington city. The greatest length is 382 miles, and its greatest breadth 206. Its mean width, however, is 140 miles. Area, 53,480 square miles.

Q. Are there any mountains in Illinois?

A. Next to Louisiana and Delaware, this is the most level state in the Union. Although northwest of Shawneetown, there is a range of hills, which some have chosen to denominate mountains. There are considerable elevations along the Illinois river, and the bluffs of the Mississippi, in some places, might almost pass for mountains.

Describe the Valleys of Illinois.

There are no valleys, but immense plains, which shall be presently described.

Q. What are the Rivers of this State?

A. It is only necessary to look on the map of this state to see what astonishing advantages for inland navigation nature has given it.

The Mississippi which waters the whole western section, is the main stream.

Describe the Rivers.

Illinois is bounded on three sides by the Mississippi, Ohio, and Wabash rivers. The Illinois, Kaskaskia, Sangamon, and many smaller streams, are entirely within its boundaries. Others, as the Kankakee, Rock river, and Vermillion branch of the Wabash, run part of their courses within the state. The Mississippi, which, in its meanderings, runs about 700 miles along its western border, takes its rise on Cedar lake, in latitude 45° north.

From this, to the Falls of St. Anthony, a distance of about 500 miles, it runs a devious course, first southeast; then southwest; and finally southeast again; which last it continues without much deviation till it reaches the Missouri. From thence its course is a few degrees east of south to the mouth of the Ohio.

The appearance and character of Mississippi, above and below the mouth of the Missouri, are so distinctly marked

as to lead to the general opinion that the former is but a branch of the latter. The average width of the Mississippi proper, is from one half to one mile; and its current is generally from two to four miles an hour, varying according to the height and volume of the water. The mean descent of this river is about six inches per mile. Its sources are estimated by Mr. Schoolcraft to be 1,330 feet above the level of tide water at the Gulf of Mexico; the distance being computed at three thousand miles.—Below the mouth of the Missouri, the Mississippi has the turbid appearance of the Missouri, and was formerly obstructed with *snags* and *sawyers*. These obstructions to the navigation have been partially removed by the enterprising Captain Shreeve and his snag boat, in the employment of the general government; and the trees that form these obstructions have been cut away from its banks.

The principal tributaries of the Mississippi, within the state of Illinois, are Rock, Illinois, Kaskaskia, and Muddy rivers. The aboriginal name of which is said to signify "*Father of Waters*," or "*Great Waters*." The Wabash river rises in the northeastern part of Indiana, and running first a southwestern, and then a south course, enters the Ohio about 200 miles above its mouth. It is a beautiful stream, and at high water is navigated by steamboats as far as Logansport in Indiana. Its head waters approach within a short distance of the waters of the Maumee of Lake Erie, with which a canal navigation is now being constructed under the authority of the state of Indiana. About 20 miles below Vincennes, and near the junction of White river, are considerable rapids, which obstruct the navigation in low water. Funds in part have been provided, and measures are in train, by the two states, to improve the navigation at this place. The character of the lands and soil bordering on the Wabash, does not differ materially from that on the Ohio and the Mississippi;

only there is more sandy soil, and its bottoms are more subject to inundation. In this region, and especially in Lawrence and Crawford counties, there are some swamps, called by travellers *purgatories*.

The principal tributaries of the Wabash, within the state of Illinois, are the Vermillion, Embarrass, and Little Wabash.

The Illinois, from its relative position, is a river of great importance as a connecting link in the chain of internal navigable water. This stream rises in Huron territory as far north as $43^{\circ} 25'$, between the sources of Rock river and Manawake, and flowing thence west one hundred and sixty miles, unites with the Illinois river, in Lasalle county, Illinois.

If length of course is considered as the deciding criterion, Fox river is the main stream above their junction, though the name of Illinois commences with the union of the Plane and Kankakee rivers. Plane river, though more generally known, is a far inferior stream to the Kankakee. The Plane is, however, from its position an important branch. Rising westward and near the shore of Lake Michigan, and flowing south nearly parallel to and about 10 miles of that lake, it has become at seasons of high water, a navigable stream 12 miles from Chicago. Thence inflecting to the southwest 40 miles, it joins the Kankakee to form Illinois.

Kankakee river is composed of two branches, Kankakee proper and Pickimink rivers. The former has its extreme source in St. Joseph's county, Indiana, and by a general course of south-west by west, about 100 miles, receives the Pickimink from the southward. The latter also has its source in Indiana, from whence curving to the southward, but by a general western course joins the Kankakee. The two rivers are nearly of similar volume and length. Below their union the water bends to north-

northwest 15 miles, to where it mingles with that of Plane river. Both the Kankakee and Pickimink, have channels curving in a very remarkable manner with the outline of the southern part of Lake Michigan. Below the union of Plane and Kankakee, the Illinois flows about 60 miles very nearly west, receiving the Fox river, from the north, and Vermillion from the south, and falling over rapids, inflects abruptly to the south-southwest. The upper part of the Illinois valley encircles the southern part of Lake Michigan, about 200 miles.

Below the great bend, the Illinois with a considerable western curve pursues a general south-southwestern course 200 miles, to its junction with the Mississippi. If measured by the channel of Fox river, the entire comparative length of Illinois, is very near 400 miles. Below the great bend it is augmented by Spoon river from the west, and by the much larger volume of Sangamon, and also from both sides by numerous creeks.

The river itself approaches to that of a tortuous canal, in many parts widening into swells that appear similar to lakes. Politically a small section drained by the higher part of Rock river, is in Huron, area about 700 square miles. Both branches of Kankakee rise in Indiana.

Rock river, unimportant stream of Huron and Illinois, having its remote sources in the former at lat. 44°, long. 10° 40' west W. C., and between lakes Huron and Winnebago. Flowing thence south-southwest, by comparative courses 100 miles between, and very nearly parallel to the two Fox rivers, to the influx of Goosekehawn from the northwest. Goosekehawn has its source a few miles southward of the Portage between Ouisconsin and Fox river, of Lake Michigan. Rising on a flat, and in winter and spring, a generally very wet region, the Goosekehawn in most of its course, is in reality a congeries of lakes, and is marked on the maps as the Four Lakes;

general course southeast; length 50 miles. Below the mouth of Goosekehawn, Rock river maintains its original course 50 miles, to the influx of Sugar creek, or rather Peektano river, also from the northwest.

The Peektano is the most considerable branch of Rock river, and rises by numerous branches in Iowa county, Huron, between the Mississippi and Ouisconsin. Comparative length, about 100 miles, and general course to the southeast.

Sugar creek and Peektano are separate streams in Huron, and do not unite until the latter has flown 50, and the former 25 miles, in the northern part of Illinois. The main stream also enters Illinois about 25 miles above the mouth of Peektano. It falls into the Mississippi river in Rock Island county, at lat. $47^{\circ} 27'$ after a comparative course of 250 miles.

Sangamon river is a branch of Illinois river. This stream has its remote fountains on the plains, from which flow to the northwest the Vermillion branch of Illinois, to the north the Pickmink branch of Illinois, to the southeast the Vermillion branch of Wabash, and southward the extreme sources of Kaskaskia river. Flowing from this plain, the Sangamon flows southward about 30 miles, and thence sweeping an elliptic curve to the southwest, south and west about 100 miles, attains its greatest southern bend a few miles above the influx from the south of the Mowawequa river, deflecting to the northwest 30 miles to the influx from the northeast of Sugar creek. Below the mouth of Sugar creek, the Sangamon, turning to westward 30 miles, falls into Illinois, in Morgan county. The entire comparative length of Sangamon may be stated at 200 miles

The Mowawequa or southern branch of Sangamon rises in Shelby and Montgomery counties, and flowing northwest, joins the main stream in Sangamon county.

Embosomed in the long curve of the main stream of Sangamon, and to the northward of that channel, the country is drained by Sugar creek, or the northern confluent of Sangamon. Sugar creek has a general western course of 70 miles, and joins the main stream in the north-western part of Sangamon county.

Spoon river, of Illinois, has its source in Putnam and Henry counties; by a southwestern course of 50 miles, it reaches the northern border of Fulton county, and inclining to south-southwest 20 miles, and afterwards to south-east 20 miles more, it falls into Illinois river.

Chicago, small, but from its relative position with Lake Michigan, and the northern sources of Illinois river, a very important stream of Cook county. The Chicago heads with the Plain, one of the northern branches of Illinois. Both rivers originate in a flat prairie country, flow nearly parallel to each other, and to the course of the adjacent shore of Lake Michigan, for a comparative distance of 30 miles. Thence diverging, the Plain river to the southwest, Chicago bending at a nearly right angle, falls into its recipient at the village of Chicago. The mouth is obstructed by a bar, on which there is only three feet water, though inside adequate depth is found for ships of almost any tonnage. The portage between Chicago and plane river is only about nine miles, and at seasons of high water small vessels are navigated over the intermediate flats.

The Kaskakia river rises in the interior of the state, nearly interlocking with the waters of Lake Michigan. It has a course in a southwest direction, of between two and three hundred miles, the greater part of which, is in high stages of water, boatable. It runs through a fine settled country, and in its long course interlocks with the sources of the Sangamon, branch of Illinois river, and

with those of the Vermillion, branch of Wabash, and flowing southwest over the counties of Vermillion, Edgar, Shelby, Fayette, Bond, Clinton, Washington, St. Clair, and Randolph, falls into the Mississippi, after a comparative course of 180 miles.

The Parassaw enters the Mississippi, between Portage des Sioux and the mouth of the Illinois. It runs through a fine tract of land. A considerable body of Irish Catholics have fixed themselves on this creek. It has a course of nearly fifty miles.

Cahokia creek has a considerable length of course in the American bottom, and enters the Mississippi not far from St. Louis. It is boatable 150 miles.

The following empty into the Ohio:—the Saline, Grand Pierre, Lush Creek, and Big Bay. Cash is a considerable stream, boatable 50 miles.

Q. What is the face of the country, and the quality of the soil?

A. The general surface is level, or moderately undulating; the northern and southern portions are broken and somewhat hilly, but no portion of the state is traversed with ranges of hills or mountains. At the verge of the alluvial soil on the margins of rivers, there are ranges of “bluffs” intersected with ravines. The bluffs are usually from one hundred to one hundred and fifty feet high, where an extended surface of table land commences, covered with prairies and forests of various shapes and sizes.

There are several varieties of surface in this state.

1. *Inundated Lands.*—This is the term applied to all those portions, which, for some part of the year, are under water. These include portions of the river bottoms, and portions of the interior of large prairies, with the lakes and ponds which, for half the year or more, are without

water. The term "bottom" is used throughout the west, to denote the alluvial soil on the margin of rivers, usually called "intervales" in New England. Portions of this description of land are flowed for a longer or shorter period, when the rivers are full. Probably one-eighth of the bottom lands are of this description; for though the waters may not stand any length of time, it wholly prevents settlement and cultivation, though it does not interrupt the growth of timber and vegetation.

As our prairies mostly lie between the streams that drain the country, the interior of the large ones are usually level. Here are formed ponds and lakes after the winter and spring rains, which remain to be drawn off by evaporation, or absorbed by an adhesive soil. Hence the middle of our large level prairies are wet, and for several weeks portions of them are covered with water. To remedy this inconvenience completely, and render all this portion of the soil dry and productive, only requires a ditch or drain of two or three feet deep to be cut into the nearest ravine. In many instances, a single furrow with the plough, would drain many acres.

2. *River Bottoms or Alluvion.*—The surface of our alluvial bottoms is not entirely level. In some places it resembles alternate waves of the ocean, and looks as though the waters had left their deposit, in ridges and retired.

The portion of bottom land capable of present cultivation, and on which the waters never stand, (if at an extreme freshet) it is covered, is a soil of exhaustless fertility; a soil that for ages past has been gradually deposited by the annual floods. Its average depth on the American bottom is from twenty to twenty-five feet. Logs of wood, and other indications, are found at that depth. The soil dug from wells on these bottoms, produces luxuriantly the first year.

The most extensive and fertile tract, of this description of soil, in this state, is the *American Bottom*, a name it received when it constituted the western boundary of the United States, and which it has retained ever since. It commences at the mouth of Kaskaskia river, five miles below the town of Kaskaskia, and extends northwardly along the Mississippi to the bluffs at Alton, a distance of ninety miles. Its average width is five miles, and contains about 450 square miles, or 288,000 acres. Opposite St. Louis, in St. Clair county, the bluffs are seven miles from the river. The soil of this bottom is an argillaceous or silicious loam, according as clay or sand happens to predominate in its formation.

On the margin of the river, and of some of its lakes, is a strip of heavy timber, with a thick undergrowth, which extends from half a mile to two miles in width; but from thence to the bluffs, it is principally prairie. It is interspersed with sloughs, lakes, and ponds, the most of which becomes dry in autumn.

The soil of the American bottom is inexhaustibly rich. About the French towns it has been cultivated, and produced corn in succession for more than a century, without exhausting its fertilizing powers. The only objection that can be offered to this tract is its unhealthy character. This, however, has diminished rapidly within eight or ten years.

The villages of Kaskaskia, Prairie du Rocher, and Cahokia, were built up by French industry in places where Americans would have perished. Cultivation has, no doubt, rendered this tract more salubrious than formerly; and an increase of it, together with the construction of drains and canals, will make it one of the most eligible in the States.

The bottoms of Illinois, where not inundated, are equal

in fertility, and the soil is less adhesive than most parts of the American bottom. This is likewise the character of the bottoms in the northern parts of the state.

The bottoms of the Kaskaskia are generally covered with a heavy growth of timber, and in many places inundated when the river is at its highest floods.

The extensive prairies adjoining, will create a demand for all this timber. The bottom lands on the Wabash are of various qualities. Near the mouth, much of it is inundated. Higher up it overflows in high freshets.

These bottoms, especially the American, are the best regions in the United States for raising stock, particularly horses, cattle, and swine. Seventy-five bushels of corn to the acre is an ordinary crop.

The roots and worms of the soil, the acorns and other fruits from the trees, and the fish of the lakes, accelerate the growth of the swine.

Horses and cattle find exhaustless supplies of grass in the prairies; and pea vines, buffalo grass, wild oats, and other herbage in the timber, for summer range; and often throughout most of the winter.

3. *Prairies*.—Much the largest proportion is undulating, dry, and extremely fertile. Other portions are level, and the soil in some cases proves to be wet;—the water, not running off freely, is left to be absorbed by the soil, or evaporated by the sun. Crawfish throw up their hillocks in this soil, and the farmer who cultivates it will find his labors impeded by the water.

In the southern part, (that is south of the National Road leading from Terre Haute to the Mississippi,) the prairies are comparatively small, varying in size from those of several miles in width, to those which contain only a few acres.

As we go northward, they widen and extend on the more elevated ground between the water courses to a

vast distance, and are frequently from six to twelve miles in width.

Their borders are by no means uniform. Long points of timber project into the prairies, and line the banks of the streams, and points of prairie project into the timber between these streams.

The fire annually sweeps over the prairies, destroying the grass and herbage, blackening the surface, and leaving a deposit of ashes to enrich the soil.

1. *Barrens*.—This term, in the western dialect, does not indicate *poor land*, but a species of surface of a mixed character, uniting forest and prairie.

The timber is generally scattering, of a rough and stunted appearance, interspersed with patches of hazle and brushwood, and where the contest between the fire and timber is kept up, each striving for mastery.

Like all other tracts of country, the barrens present a considerable diversity of soil. In general, however, the surface is more uneven or rolling than the prairies, and sooner degenerates into ravines and sink-holes.

Wherever timber barely sufficient for present purposes can be found, a person need not hesitate to settle in the barrens. These tracts are almost invariably healthy; they possess a greater abundance of pure springs of water, and the soil is better adapted for all kinds of produce, and all descriptions of seasons, wet and dry, than the deeper and richer mould of the bottoms and prairies.

5. *Forest, or timbered Land*. In general, Illinois is abundantly supplied with timber, and were it equally distributed through the state, there would be no part in want. The rapidity with which the young growth pushes itself forward, without a single effort on the part of man to accelerate it, and the readiness with which the prairie becomes converted into thickets, and then into a forest of

young timber, shows that, in another generation, timber will not be wanting in any part of Illinois.

The kinds of timber most abundant are oaks of various species, black and white walnut, ash of several kinds, elm, sugar maple, honey locust, hackberry, linden, hickory, cotton wood, pecaun, mulberry, buckeye, sycamore, wild cherry, box elder, sassafras, and persimmon. In the southern and eastern parts of the state are yellow poplar and beech; near the Ohio are cypress, and in several counties are clumps of yellow pine and cedar. On the Calamick, near the south end of Lake Michigan, is a small forest of white pine. The undergrowth are redbud, paw-paw, sumach, plum, crab apple, grape vines, dogwood, spice bush, green brier, hazle, &c.

The alluvial soil of the rivers produces cotton wood and sycamore timber of amazing size.

6. There are but few tracts of *stony ground* in the state; that is, where loose stones are scattered over the surface, and imbedded in the soil. Towards the northern part of the State, tracts of stony ground exist. Quarries of stone exist in the bluffs, and in the banks of the streams and ravines throughout the state.

The soil is porous, easy to cultivate, and exceedingly productive. A strong team is required to break up the prairies, on account of the firm, grassy sward which covers them. But when subdued, they become fine, arable lands.

Q. What are the Minerals of Illinois?

A. The northern portion of Illinois is inexhaustibly rich in mineral productions, while coal, secondary limestone, and sandstone, are found in every part.

Iron ore has been found in the southern parts of the State, and is said to exist in considerable quantities in the northern parts.

Native copper, in small quantities, has been found on Muddy river, in Jackson county, and back of Harrisonville, in the bluffs of Monroe county. Crystallized gypsum has been found in small quantities in St. Clair county. Quartz crystals exist in Gallatin county.

Silver is supposed to exist in St. Clair county, two miles from Rock Spring, from whence Silver creek derives its name. In early times; a shaft was sunk here by the French, and tradition tells of large quantities of the precious metals being obtained.

In the southern part of the state, several sections of land have been reserved from sale, on account of the silver ore they are supposed to contain.

Lead is found in vast quantities in the northern part of Illinois, and the adjacent territory. Here are the richest lead mines hitherto discovered on the globe. This portion of country lies principally north of Rock river, and south of the Wisconsin. Dubuque's, and other rich mines, are west of the Mississippi.

Native copper, in large quantities, exists in this region, especially at the mouth of Plum creek, and on the Peek-a-ton-o-kee, a branch of Rock river.

Bituminous coal abounds in Illinois. It may be seen frequently in the ravines and gullies, and in the points of bluffs. Exhaustless beds of this article exist in the bluffs of St. Clair county, bordering on the American bottom, of which, large quantities are transported to St. Louis, for fuel. There is scarce a county in the state, but what can furnish coal in reasonable quantities. Large beds are said to exist near the Vermillion of the Illinois, and in the vicinity of the rapids of the latter.

A petrified tree of black walnut was found in the bed of the river Des Plaines, about 40 rods above its junction with the Kankakee, imbedded in a horizontal position, in

a stratum of limestone. There are fifty-one and a half feet of the trunk visible, eighteen inches in diameter at the smallest, and probably three feet at the other end.

Muriate of soda, or common salt, is found in various parts of the state, held in solution in the springs. The manufacture of salt, by boiling and evaporation, is carried on in Gallatin county, 12 miles west-north-west from Shawneetown, in Jackson county, near Brownsville; and in Vermillion county near Danville. The springs and land are owned by the state, and the works leased.

A coarse freestone much used in building, is dug from quarries near Alton, on the Mississippi, where large bodies exist.

Scattered over the surface of our prairies, are large masses of rock, of granite formation, roundish in form, usually called by the people "*lost rocks*." They will weigh from one thousand, to ten or twelve thousand pounds, and are entirely detached, and frequently are found, several miles distant from any quarry. Nor has there ever been a quarry of granite discovered in the state. These stones are denominated *boulders*, in mineralogy. They usually lie on the surface, or are partially imbedded in the soil of our prairies, which is unquestionably of diluvial formation. How they came here is a question of difficult solution.

Q. Are there any mineral or medical springs in this State?

A. Medicinal waters are found in different parts of the state. These are chiefly sulphur springs and chalybeate waters. There is said to be one well in the southern part strongly impregnated with the sulphate of magnesia, or Epsom salts, from which considerable quantities have been made for sale, by simply evaporating the water in a kettle over a common fire. There are several sulphur

springs in Jefferson county, to which persons resort for health.

Q. Are there any caves in this State?

A. The "Cave in Rock," or "House of Nature," below Shawneetown, is pointed out to passengers on the Ohio, as a great curiosity, and its front is marked with the names of its visitors. Above and below it, are high, perpendicular limestone bluffs, surmounted with cedars, above which are sailing in the blue, eagles, birds of prey, or aquatic fowls. The entrance to the cave is just above high water mark. It has an arched roof of 25 or 30 feet high, and extends back 130 feet. It has occasionally afforded a temporary winter asylum to families descending the river.

Q. What are the natural curiosities in Illinois?

A. Rock Fort is a projection from the left bank of the Illinois river. Its base is washed on three sides by the Illinois, which here flows rapidly over a rocky bed. Broken masses of rock are seen above the surface of the water. The judgment of the beholder would give the height of this cliff at 250 feet. The actual admeasurement however, might fall short of this. * Its perpendicular sides, arising from the river, are inaccessible. It is connected with a chain of hills that extend up the Illinois by a narrow ledge, the only ascent to which is by a winding and precipitous path. This rock has on its top a level surface, three-fourths of an acre in extent, and covered by a soil, several feet in depth, which has thrown up a growth of young trees. These form, as they receive their peculiar tints from the seasons, a verdant or gorgeous, and party-coloured crown, for this battlement of nature's creation. The advantages which it affords, as an impregnable retreat, induced a band of Illinois Indians, who sought a refuge from the fury of the Pottawattamies, with whom

they were at war, to intrench themselves here. They repulsed all the assaults of their besiegers, and would have remained masters of their high tower, but for the impossibility of longer obtaining supplies of water. They had been used to attaching vessels to ropes of bark, and dropping them into a river from an overhanging point. Their enemies stationed themselves in canoes at the base of the cliff, and cut the ropes as fast as they were let down. The consequence of this was a surrender, and the entire extirpation of the band. An intrenchment is distinctly visible, and fragments of antique pottery, and other curious remains of the vanished race are strewn around.

Q. What are the natural productions of this State ?

A. The principal trees and shrubs of Illinois have been noticed under the head of "*Forest, or Timbered Land.*" Of oaks there are several species, as overcup, burr oak, swamp or water oak, white oak, red or Spanish oak, post oak, and black oak of several varieties, with the black-jack, a dwarfish, gnarled looking tree, excellent for fuel, but good for nothing else. The black walnut is much used for building materials and cabinet work, and sustains a fine polish.

In most parts of the state, grape vines, indigenous to the country, are abundant, which yield grapes that might advantageously be made into excellent wine. Foreign vines are susceptible of easy cultivation. These are cultivated to a considerable extent at Vevay, Switzerland county, Indiana, and at New Harmony on the Wabash. The indigenous vines are prolific, and produce excellent fruit. They are found in every variety of soil; interwoven in every thicket in the prairies and barrens; and climbing to the tops of the very highest trees on the bottoms. The French in early times, made so much wine as to export some to France; upon which the proper autho-

rities prohibited the introduction of wine from Illinois, lest it might injure the sale of that staple article of the kingdom. I think the act was passed by the board of trade, in 1774.

The editor of the Illinois Magazine remarks:

"We know one gentleman who made twenty-seven barrels of wine in a single season, from the grapes gathered with but little labour, in his immediate neighbourhood."

The wild plum is found in every part of the state; but in most instances the fruit is too sour for use, unless for preserves. Crab apples are equally prolific, and make fine preserves with about double their bulk of sugar. Wild cherries are equally productive. The persimmon is a delicious fruit, after the frost has destroyed its astringent properties. The black mulberry grows in most parts, and is used for the feeding of silk-worms with success. They appear to thrive and spin as well as on the Italian mulberry. The gooseberry, strawberry, and blackberry, grow wild and in great profusion. Of our nuts, the hickory, black walnut, and pecaun, deserve notice. The last is an oblong, thin-shelled, delicious nut, that grows on a large tree, a species of the hickory, (the *Carya olivæ formis* of Nuttall.) The pawpaw grows in the bottoms, and rich timbered uplands, and produces a large, pulpy, and luscious fruit.

Q. What is the climate of Illinois?

A. In the southern part of the state, during the three winter months, snow frequently falls, but seldom lies long. In the northern part, the winters are as cold, but not so much snow falls, as in the same latitudes in the Atlantic States.

We are satisfied, (says Beck,) after a long course of observations, much travelling, and conversing with many hundreds of families with the view of arriving at correct

conclusions on these subjects, that there is no such operation as that of emigrants undergoing a seasoning, or becoming acclimated, in the states of Ohio, Indiana, Illinois, Missouri, Kentucky, Tennessee, Michigan, or the Wisconsin Territory. Nor does it make the least difference from what part of the United State, or Europe, they come, nor whether they arrive here in spring or autumn. The impression has formerly existed abroad, that Illinois is less healthy than other western states. This is entirely erroneous.

New comers will find it advantageous for protecting themselves from the damp atmosphere at night, to provide close dwellings; yet when the air is clear, to leave open doors and windows at night for free circulation, but not to sleep directly in the current of air; and invariably to wear thin clothing in the heat of the day, and put on thicker garments at night, and in wet and cloudy weather.

Those families are seldom sick who live in comfortable houses, with tight floors, and well ventilated rooms; and who, upon change of weather, and especially in time of rains, make a little fire in the chimney.

In case of sickness, physicians are to be found in almost every county, and every season adds to their number. Charges are somewhat higher than in the northern states. Many families keep a few simple articles of medicine, and administer for themselves. Calomel is a specific; and is taken by multitudes without hesitation, or fear of danger.

The *milk sickness* is a disease of a singular character, which prevails in certain places. It first affects animals, especially cows, and from them is communicated to the human system by eating the milk or flesh. Much speculation has been had upon its cause, which is still unknown. The prevailing idea is, that it is caused by some poisonous substance eaten by the cattle, but whether vegetable or mineral, remains undetermined. Physicians and others

have attempted to ascertain the cause of this disease, but hitherto without success.

Describe briefly the Government of this State.

The constitution of Illinois was adopted at Kaskaskias, 26th August. 1818. The legislative authority of this state is vested in a general assembly, which consists of a senate and house of representatives, both elected by the people. No person can be a representative who has not attained to the age of 21 years, who shall not be a citizen of the United States, and an inhabitant of this state, who shall not have resided within the limits of the county or district in which he shall be chosen, twelve months next preceding his election, unless absent on public business, &c. No person shall be a senator who has not arrived at the age of 25 years, who shall not be a citizen of the United States, and who shall not have resided one year in the county or district in which he shall be chosen immediately preceding his election, &c.

The executive power of this state is vested in a governor. The governor is chosen by the electors of the members of the general assembly, at the same places, and in the same manner that they respectively vote for members thereof. The governor holds his office for four years, and until another shall be elected and qualified; but he is not eligible for more than four years in any term of eight years. Must be 30 years of age when elected, a citizen of the United States, and two years next preceding his election a resident of Illinois.

A lieutenant governor is chosen at every election for governor, in the same manner, to continue in office for the same time, and possess the same qualifications. The lieutenant governor is speaker of the senate, &c.

The judicial power of this state is vested in one supreme court, and such inferior courts as the general assembly shall, from time to time, ordain and establish.

The justices of the supreme court, and the judges of the inferior courts, are appointed by joint ballot of both branches of the general assembly, and commissioned by the Governor; their offices during good behaviour. Removeable by impeachment or by address of two-thirds of each branch of the general assembly.

The governor has power to grant reprieves and pardon after conviction, except in cases of impeachment, and has farther the usual powers and duties to perform of governors of the other respective states. From any disability, death, &c. of the governor, the powers and duties of the office devolve on the lieutenant governor.

By the general provisions of the constitution of Illinois, the right of suffrage is secured to the white male citizens above 21 years of age.

No person can be imprisoned for debt unless on refusal to deliver up his property, or on strong suspicions of fraud. The right of trial by jury is to remain inviolate. By article 6th, section 1, neither slavery nor involuntary servitude is to be introduced into the state. All children born in the state, white or coloured, become free, the males at 21, and the females at 18. Liberty of the press, of public worship, limited only by the public peace.

Q. What is the population of Illinois?

A. In 1830 the population amounted to 157,445; and in 1825 the population was 272,427.

Q. What are the civil divisions of Illinois?

A. There are 66 counties laid off in this state; 59 of which are organized for judicial purposes. The six last named in the following table were laid off at the recent session of the legislature, January, 1836.

In this state, there are no *civil* divisions into townships as in Ohio, &c. The township tracts of six miles square, in the public surveys, relate exclusively to the land system.

COUNTIES.	Date of Formation.	Square Miles.	Population in 1835	SEATS OF JUSTICE.
Adams, - -	1825	820	7042	Quincy,
Alexander, - -	1819	375	2050	Unity,
Bond, - - -	1817	300	3580	Greeneville,
Calhoun, - -	1825	260	1091	Gilead,
Champaign, - -	1833	864	1045	Urbanna,
Clark, - - -	1819	500	3413	Marshall,
Clay, - - -	1824	620	1648	Maysville,
Clinton, - - -	1824	500	2648	Carlyle,
Crawford, - -	1816	378	3540	Palestine,
Coles, - - -	1830	1248	5125	Charleston,
Cook, - - -	1830		9826	Chicago,
Edgar, - - -	1823	648	6668	Paris,
Edwards, - - -	1814	200	2006	Albion,
Effingham, - -	1831	486	1055	Ewington,
Fayette, - - -	1821	684	3638	VANDALIA,
Franklin, - - -	1818	850	5551	Frankfort,
Fulton, - - -	1825	590	5917	Lewistown,
Gallatin, - - -	1812	828	8660	Equality,
Greene, - - -	1821	912	12274	Carrollton,
Hamilton, - - -	1821	378	2877	McLeansborough,
Hancock, - - -	1825	775	3249	Carthage,
Henry, - - -	1825	800	118	
Iroquois, - - -	1833		1164	
Jackson, - - -	1816	576	2783	Brownsville,
Jasper, - - -	1831	288	415	Newton,
Jefferson, - - -	1819	576	3350	Mount Vernon,
Jo Daviess, - -	1827		4038	Galena,
Johnson, - - -	1812	486	2166	Vienna,
Knox, - - -	1825	792	1600	Knoxville,
Lasalle, - - -	1831		4754	Ottawa,
Lawrence, - - -	1821	560	4450	Lawrenceville,
Macon, - - -	1829	1404	3022	Decatur.
Madison, - - -	1812	750	9016	Edwardsville,
Macoupin, - - -	1829	720	5554	Carlinville,
Marion, - - -	1823	576	2844	Salem,

COUNTIES.	Date of Formation.	Square Miles.	Population in 1835.	SEATS OF JUSTICE.
McDonough, -	1825	576	2883	Bloomington,
McLean, - -	1830	1916	5311	New Boston,
Mercer, - -	1825	558	497	Macomb,
Monroe, - -	1816	360	2660	Waterloo,
Montgomery, -	1821	960	3740	Hillsborough,
Morgan, - -	1823	1150	19214	Jacksonville,
Peoria, - -	1824	648	3220	Peoria,
Perry, - -	1827	446	2201	Pinckneyville,
Pike, - -	1821	800	6037	Pittsfield,
Pope, - -	1816	576	3756	Golconda,
Putnam, - -	1825	1340	4021	Hennepin,
Randolph, - -	1795	540	5695	Kaskaskia,
Rock Island, -	1831	377	616	Stephenson,
Sangamon, - -	1821	1234	17573	Springfield,
Schuyler, - -	1825	864	6361	Rushville,
Shelby, - -	1827	1080	4848	Shelbyville,
St. Clair, - -	1795	1030	9055	Belleville,
Tazewell, - -	1827	1130	5850	Tremont,
Union, - -	1818	396	4156	Jonesboro',
Vermillion, - -	1826	1000	8103	Danville,
Wabash, - -	1824	180	3010	Mount Carmel,
Warren, - -	1825	900	2623	Monmouth,
Washington, -	1818	656	3292	Nashville,
Wayne, - -	1819	576	2939	Fairfield,
White, - -	1815	516	6489	Carmi.
NEW COUNTIES, FORMED JANUARY, 1836.			272427	
Will, - -				Juliett,
Whiteside, - -				The seats of justice are not established in these counties, and much of the land unsurvey'd.
Kane, - -				
Ogle, - -				
M'Henry, - -				
Winnebago, -				

Q. What are the boundaries &c. of Adams county?

A. Adams is bounded on the north by Hancock; east Schuyler; southeast and south by Pike; and on the west is separated from Marion county and a section of the unappropriated part of the state of Missouri by the Mississippi river.

The western and central parts of this county slope westward towards the Mississippi river, whilst the eastern border gives source to creeks, the water of which is finally discharged into Illinois river.

Its streams are Bear creek and branches, Cedar, Tyrer, Mill, Fall, and Pigeon creeks, with the Mississippi on its western border. Timber various, with equal proportions of prairie.*

Q. What description can you give of Alexander county?

A. Alexander county is bounded north by Union, Johnson northeast, the Ohio river separating it from McCracken county Kentucky southeast; and the Mississippi river separating it from from Scott county Missouri south and southwest, and from Cape Girardeau county Missouri west and northwest. This county occupies the peninsula above and below the junction of the Ohio and Mississippi rivers. Cash river or creek a small stream rising in Union, and Johnson counties, traverses Alexander in another direction, falling into the Ohio river about 5 miles above its junction with the Mississippi. It is all timbered; half alluvion, some inundated at high water; lime and sandstone on the Ohio; soil generally rich.

Q. What are the boundaries, &c. of Bond county?

A. Bond county is bounded by Clinton south; Madison west; Montgomery north, and Lafayette east. The slope is nearly due south, and in that direction is drained by

* For county towns, square miles, and population, see table page.

Shoal creek and other small streams flowing into Kaskaskia river.

It has regular proportions of timber and prairie; rather level; second rate. Minerals are sandstone and coal; also salt springs.

Q. What are the boundaries, &c. of Calhoun county?

A. Calhoun county of Illinois, comprising the point between the Mississippi proper and Illinois rivers, is bounded by Illinois river, separating it from Greene county east, and the Mississippi river, separating it from St. Charles county Missouri south, Lincoln county Missouri west, and Pike county Missouri north. This county is alluvial, and sometimes inundated along the rivers; broken bluffs along the rivers; but the interior is table land; soil is good; prairies at the foot of the bluffs. Minerals; coal, lime and sandstone.

Q. What are the boundaries, &c. of Champaign county?

A. It is bounded north by Iroquois; east by Vermillion; south by Coles; and west by Macon and McLean counties. The streams are the heads of the Kaskaskia, Sangamon, Vermillion of Illinois, Salt Fork of the Vermillion of the Wabash, and the Embarras, all running in opposite directions. It has extensive prairies, is a little undulating, and very rich; timber in groves; many granite boulders.

Q. What are the boundaries, &c. of Clark county?

A. Clark county is bounded south by Crawford; west by Shelby; north by Edgar; by Wabash river, separating it from Vigo county Indiana east; and from Sullivan county Indiana, southeast. Little Wabash rises in the west part of Clark, which is traversed also by the west and east branches of Embarras river; all those streams flowing to the southward. The eastern part slopes south-eastward obliquely towards the Washitau. The soil of this county is second rate. It has both timber and prairies.

Q. What are the boundaries, &c. of Clay county?

A. Clay county is bounded southeast by Edwards, south by Wayne, southwest by Marion, northwest by Fayette, north and northeast by Crawford, and east by Lawrence. The main stream of Little Wabash enters the northern border from Fayette, and inflecting to southeast receives numerous creeks from, and traverses Clay, issuing from it in the southeast angle. Two-thirds of this county are prairie of inferior quality, rather level and wet.

What are the boundaries, &c. of Clinton county?

A. Clinton county is bounded by Washington south, St. Clair southwest, Madison northwest, Bond north, Fayette northeast, and Marion east. This county is traversed from its northern border in a direction of south southwest by Kaskaskia river and by Shoal creek and other of its branches.

The surface is undulating; soil second rate.

Q. What are the boundaries, &c. of Crawford county?

A. Crawford county is bounded southeast by Lawrence, southwest by Clay, west by Lafayette, north by Clark, northeast by the Wabash river, separating it from the northern part of Sullivan county, Indiana, east by Wabash river, separating it from the southern part of Sullivan county, Indiana, and the Wabash river, separating it from the northwest angle of Knox county, Indiana.

This county is traversed in a southeast direction, and subdivided into two not very unequal sections by Embarras river. Some of the higher sources of the Little Wabash rise in its southwest angle. The general slope is a little east of south.

This county has some level prairies, is rather sandy, with a full supply of timber. County town is Palestine, situated near the right bank of Wabash river.

Q. What are the boundaries, &c. of Cole county?

A. Cole county is bounded by Jasper southeast, Effing-

ham southwest, Shelby west, Macon northwest, Vermillion northeast, and Edgar and Clark east.

This county contains a table land from which flow the Kaskaskias to south-southwest, and the Embarras to south.

This county contains much excellent land; undulating, rich prairies; some level and wet land in the southern part. Timber is in sufficient quantities.

Q. What are the boundaries, &c. of Cook county?

A. Cook county is bounded by the northwestern angle of Indiana, southeast, Lasalle southwest and west, and Lake Michigan northeast.

Though bounded on the northeast by Lake Michigan, the slope of more than nine-tenths of Cook county is to the southwestward. Plane river, rising near its northern border flows southward about 30 miles at a mean distance of about eight miles, until it reaches a point 12 miles southwest from Chicago on Lake Michigan, from whence inflecting to southwest 40 miles, it joins Pickinink river, forming Illinois river, near the border between Lasalle and Cook counties. The latter contains, therefore, the natural water communication most direct between the Canadian lakes and the basin of Mississippi river. The intermediate country is an almost unbroken plain, and at times of high water canoes can be navigated over it, and almost inviting man to complete the work commenced by Nature.

Q. What are the boundaries, &c. of Edgar county?

A. Edgar county is bounded north by Vermillion; east by the state of Indiana, south by Clark, and west by Cole county. It is watered by Big, Clear, and Brulette's creeks, which are small streams, and enter the Wabash. Little Embarras heads in the western and southwestern parts of this county, and runs southwest into Cole. The south and east sides of this county are well timbered,

with all the varieties found in the eastern side of the state, including poplar. The soil in general is rich, adapted to the various productions of this state.

It has a number of saw mills, grist mills, and various other mills and machinery in active operation.

Q. What are the boundaries, &c. of Edwards county ?

A. Edwards county lies on the Little Wabash river, and has Lawrence county on the north, Wabash county east, White county south, and Wayne county west.

It is proportionally divided into timber and prairie. The prairies are small, high, undulating, and bounded by heavy timber. The English settlement formed by Messrs. Berbeck and Flowers, is in this county. It is watered by the Little Wabash river, and the Bon Pas, and their branches.

Q. What are the boundaries, &c. of Effingham county ?

A. Effingham county is bounded north by Shelby, and a corner of Cole, east by Jasper, south by Clay and a corner of Fayette, and west by Fayette. It is watered by the Little Wabash river and its branches, and contains good second rate land, tolerably level.

Q. What are the boundaries, &c. of Fayette county ?

A. Fayette was formed from Bond, Edwards, Crawford, and Clark, in 1821. It is situated on the Kaskaskia river, and is bounded north by Shelby, east by Effingham, south by Marion, and a corner of Clinton, and west by Bond and Montgomery. Besides the Kaskaskia, it is watered by Hurricane fork, Higgin's, Ramsey's, and Beck's creeks on the west, and by Big and Hickory creeks on the east. The land is similar to that in Effingham county.

The principal settlements are Hurricane Seminary township, Backmaster's, Halls, Browns, Wakefields, Haley's, and Big Creek. There are several grist mills, and a steam saw mill in this county.

Q. What are the boundaries, &c. of Franklin county?

A. Franklin county is bounded north by Jefferson, east by Hamilton and Gallatin, south by Johnson and Union, and west by Jackson and a corner of Perry county. It is watered by Big Muddy river and branches, and the south fork of Saline creek. The prairies are generally small and fertile, but rather too level; timber in abundance; soil sandy.

Q. What are the boundaries, &c. of Fulton county?

A. Fulton county is bounded north by Knox, east by Peoria, south by the Illinois river and Schuyler county, and west by Schuyler and M'Donough counties. The Illinois washes its southeastern side, and gives it an irregular shape. The Spoon river passes through it; and Otter creek waters the southwestern, and Copperas creek the northeastern portions. Nearly one-half is heavily timbered, and the land is of an excellent quality.

The streams in this county furnish good mill seats. This, in common with all the country bordering on the Illinois, promises to become a wealthy agricultural country.

Q. What are the boundaries, &c. of Gallatin county?

A. Gallatin county is bounded north by White county, east by the states of Indiana and Kentucky, south by Pope county, and west by Pope and Franklin counties. It is washed by the Wabash and Ohio river, and Saline creek.

This county is well adapted to the raising of stock.

Q. What are the boundaries, &c. of Greene county?

A. Greene county is bounded north by Morgan, east by Macoupen, south by Madison and the Mississippi river, and west by the Illinois river. The soil resembles that of Fulton county.

Q. What are the boundaries &c. of Hamilton county?

A. It is bounded north by Wayne, east by White, south

by Gallatin, and west by Franklin and Jefferson counties. Its waters are the Saline creek, and Little Wabash river. The soil is second rate.

Q. What are the boundaries, &c. of Hancock county?

A. Hancock county lies north of Adams, west of McDonough, south of Warren; and is washed by the Mississippi on its western side. Hancock prairie, from 12 to 20 miles in width, runs through this county. Its waters are Bear, Camp, and the branches of crooked creeks. Land is excellent.

Q. What are the boundaries, &c. of Henry county?

A. Henry county is bounded north by Rock river, east by Jo Davies and Putnam, south by Knox, and west by Mercer and Rock Island counties. It is watered by Edwards, and some of the head branches of Spoon river, Rock river, and the Winnebago swamp and outlet. Land is good.

Q. What are the boundaries, &c. of Iroquois county?

A. It is bounded north by Cook county, east by the state of Indiana, south by Vermillion county, and west by an unsettled strip of country.

Kankakee, Iroquois, and Sugar creeks, are its principal water courses. It is attached as yet to Vermillion county. Soil same as in Gallatin county?

Q. What are the boundaries, &c. of Jackson county?

A. Jackson county has Randolph on the north, Franklin on the east, and Union county south; and on the west it is bounded by the Mississippi river and part of Randolph county. Its land is good, and well timbered. Its exports are salt, coal, beef, pork, horses, &c.

Q. What are the boundaries, &c. of Jasper county?

A. Jasper county is bounded north by Cole, east by Crawford, south by Lawrence and Clay, and west by a corner of Clay and Effingham. Its waters are the Em-

barras, and the Muddy Fork of the Little Wabash. Land good.

Q. What are the boundaries, &c. of Jefferson county?

A. Jefferson county is bounded north by Marion, east by Wayne and Hamilton, south by Franklin, and west by Perry and Washington. It is watered by the branches of Big Muddy, and a small branch of the Little Wabash. The soil is second rate.—About one third prairie.

Q. What are the boundaries, &c. of Jo Daviess county?

A. Jo Daviess county is bounded north by the Wisconsin territory, east by Rock river, south by Putnam, Henry and Rock Island counties, and west by the Mississippi river. It is watered by Fever river, Apple, Rush and Plum creeks, and some smaller streams. This county is rich for mining and agriculture.

Q. What are the boundaries, &c. of Johnson county?

A. Johnson county is bounded north by Franklin, east by Pope, south by the Ohio river, and west by Union and Alexander counties. Besides the Ohio, its waters are Cash river and Big Bay creek. Land in general good;—some barrens.

Q. What are the boundaries, &c. of Knox county?

A. Knox county is bounded north by Henry, east by Peoria, south by Fulton, and west by Warren. Soil similar to that of Greene county.

Q. What are the boundaries, &c. of La Salle county?

A. La Salle county lies west of Cook, north of M'Lean, and east of Putnam. It has good soil, but is deficient in timber.

Q. What are the boundaries, &c. of Lawrence county?

A. Lawrence county is bounded north by Crawford, east by the Wabash river, south by Wabash and Edwards counties, and West by Clay. It is watered by Embarras

river and Racoon creek. In the prairies of this county are many swamps. Soil generally inferior.

Q. What are the boundaries, etc. of Macon county?

A. Macon county is bounded north by M'Lean, east by Champaign and Cole, south by Shelby, and west by Sangamon. Its waters are the Kaskaskia and tributaries, the North Fork of the Sangamon, and Salt creek. Soil first rate.

Q. What are the boundaries, etc. of Madison county?

A. Madison county is bounded north by Greene and Macoupen, east by Bond and a corner of Clinton, south by St. Clair, and west by the Mississippi river. It is watered by Silver and Cahokia creeks, and Wood river and their branches. Soil good; productions abundant, and market ready.

Q. What are the boundaries, etc. of Macoupen county?

A. Macoupen county is bounded north by Sangamon and Morgan, east by Montgomery, south by Madison, and west by Greene. It is watered by Macoupen and Cahokia creeks, and the heads of Wood's river. It is a good agricultural county.

Q. What are the boundaries, etc. of Marion county?

A. Marion county is bounded north by Fayette, east by Clay, south by Jefferson, and west by Clinton. It is watered by the east Fork of the Kaskaskia, Skillet Fork, and crooked creek. Land second rate.

Q. What are the boundaries, etc. of McDonough county?

McDonough county is bounded north by Warren, east by Fulton, south by Schuyler, and west by Hancock. Crooked creek and its branches water most of this county. Land first rate.

Q. What are the boundaries, etc. of McLean county?

A. It has La Salle on the north, Champaign east, Macon south, and Tazewell west. It is watered by the Macki-

Law, Kickapoo, Sugar creek, and Salt creek. County is elevated, and soil rich.

Q. What are the boundaries, etc. of Mercer county?

A. It lies north of Warren, west of Henry, and south of Rock Island counties, and has the Mississippi on its western side. It is watered by Pope and Edwards rivers. Prairie and woodland alternate.

Describe the boundaries, etc. of Monroe county.

Monroe county is bounded north by St. Clair, east by St. Clair and Randolph, south by Randolph, and west by the Mississippi. It is watered by Horse, Prairie de Long, and Eagle creeks. Country hilly and broken, with sink holes.

Describe Montgomery county.

Montgomery is bounded north by Sangamon, east by Shelby and Fayette, south by Bond, and west by Madison and Macoupen counties. It is watered by Shoal creek and its branches, some of the heads of the Macoupen, a branch of the South Fork of Sangamon, and the Hurricane Fork. Surface high and undulating.

Describe Morgan county.

Morgan county is bounded north and east by Sangamon, south by Macoupen and Greene, and west by the Illinois river. Indian, Mauvaiseterre, Apple, Sandy, and several other creeks rise within its borders, and furnish good mill seats. It is destined to become one of the richest agricultural counties in the state.

Describe Peoria county.

Peoria county is bounded north by Putnam, east by Tazewell, south by Fulton, and west by Knox. It is watered by the Kickapoo, the heads of Spoon river, Copperas creek, and the Senatchwine. Land tolerable.

Describe Perry county.

Perry county is bounded north by Washington, east by Jefferson and Franklin, south by Jackson, and west by

Randolph. Its waters are the Big Beaucoup, and Little Muddy. Soil good.

Describe Pike county.

Pike county is bounded north by Adams, east by Schuyler, south by the Illinois river and Calhoun, and west by the Mississippi. It is also watered by the Pigeon, Hadley, Keys, Black, Dutch, Church, Six Mile, and Bay creeks. These furnish good mill seats. Land is various.

Describe Pope county.

Pope county is bounded north by Gallatin, east and south by the Ohio river, and west by Johnson county. Lusk's creek, and some smaller streams water it. Exportations extensive, and land good.

Describe Putnam county.

Putnam county is bounded north by Jo Daviess, east by La Salle, south by Tazewell and Peoria, and west by Henry and Knox. This is a first rate county in every respect.

Describe Randolph county.

Randolph county is bounded north by Monroe, St. Clair, and Washington counties, east by Perry, and south and west by the Mississippi river. It is watered by the Kaskaskia river and St. Mary, Horse and some smaller creeks. Soil various—indifferent and first rate.

Describe Rock Island county?

The boundaries of this county are not yet properly defined. Rock river and some smaller streams water this county. Soil is rich.

Describe Sangamon county.

Sangamon county is bounded north by Tazewell, east by Macon, south by Montgomery and Macoupen, and west by Morgan county. It is watered by the Sangamon and its numerous branches. Prairies are large, and soil of the richest quality.

Describe Schuyler county.

Schuyler is bounded north by McDonough, east by Fulton and the Illinois river, south by the Illinois river and Pike, and west by Adams and a corner of Hancock. Its waters are the Illinois river; Crooked and Crane creeks. Much heavy timbered land of a rich quality.

Describe Shelby county.

Shelby county is bounded north by Macon, east by Cole, south by Effingham and Fayette, and west by Montgomery and a corner of Sangamon. It is watered by the Kaskaskia and its tributaries. Land excellent.

Describe St. Clair county.

St. Clair county is bounded north by Madison county, east by Clinton and Washington, and south by Randolph and Monroe counties. Its streams are Kaskaskia and Cahokia rivers, Prairie du Pont, Ogles, Silver, Richland, and Prairie de Long creeks. Extensive coal banks exist in this county, along the bluffs. Land various—most of it second rate.

Describe Tazewell county.

Tazewell county is bounded north by Putnam, east by McLean, south by Sangamon, and northwest by the Illinois river. It is watered by the Illinois and Mackinaw rivers, and Ten Mile, Farm, and Blue creeks. Much of the land is good.

Describe Union county.

Union county is bounded north by Jackson, east by Franklin, south by Alexander, and west by the Mississippi river. It is watered by Clear creek, some of the south branches of Big Muddy, and the heads of Cash river. Land is high and rolling.

Describe Vermillion county.

This county lies north of Edgar and Cole, east of Champaign, south of Iroquois, and west of the state of Indiana

It is watered by the Big and Little Vermillion rivers, and contains large bodies of excellent land.

Describe Wabash county.

Wabash county is bounded north by Lawrence, east by the Wabash river, and west by Edwards county. It is watered by the Wabash river, and Bon Pas creek, and also by Crawfish, Jordan and Coffee creeks. It has much good land.

Describe Warren county.

Warren county lies on the Mississippi, north of Hancock and McDonough, west of Knox, and south of Mercer. Its streams are Henderson river, and its branches. Ellison, Honey and Camp creeks. The land on these streams is excellent.

Describe Washington county.

Washington county is bounded north by Clinton, south by Perry, east by Jefferson, and west by St. Clair. Its streams are the Kaskaskia river, Elkhorn, Beaucoup, and Little Muddy creeks. The prairie is of an inferior quality.

Describe Wayne county.

Wayne county is bounded north by Clay, east by Edwards, south by Hamilton, and west by Jefferson and Marion. It is watered by the Little Wabash, Elm, and Skillet Fork.

Describe White county.

White county is bounded north by Wabash, Edwards and Wayne counties, east by the Big Wabash river, south by Gallatin, and west by Hamilton counties. It is watered by the Big and Little Wabash rivers. The prairies are fine and rich.

Describe the Chief Towns of Illinois.

VANDALIA is the seat of government till 1840, after which it is to be removed to Alton, according to a vote of

the people in 1834, unless they should otherwise direct. It is situated on the right bank of the Kaskaskia river, in North lat. $39^{\circ} 0' 42''$, and 53 miles in a direct line, a little north of east of Alton. The public buildings are temporary. Population about 750.

ALTON. Two towns of this name are distinguished as Alton, and Upper Alton. Alton is an incorporated town, situated on the bank of the Mississippi, two and a half miles above the mouth of the Missouri. For situation, commerce, business of all kinds, health, and rapidity of growth, it far exceeds any other town on the east bank of the Mississippi, above New Orleans. The population is about 2100. The commercial business done here is already immense, and extends through more than half of Illinois, besides a large trade on the western side of the Mississippi. Great facilities for business of almost every description, especially for every kind of mechanics, are to be had here. It offers one of the best situations on the western waters for building and repairing steamboats.

Alton has respectable and well finished houses of worship for the Presbyterian, Methodist Protestant, and Baptist denominations; two good schools, a Lyceum, that holds weekly meetings, and two printing-offices. The population in general, is a moral, industrious, enterprising class. Few towns in the west have equalled this in contributions for public and benevolent objects, in proportion to age and population.

The town is situated at the base, side, and top, of the first bluffs that extend to the river, above the mouth of the Kaskaskia. Adjacent to it, and which will eventually become amalgamated, is Middletown, laid off directly in the rear.

UPPER ALTON is from two and a half to three miles back from the river, and in the rear of Lower Alton, on elevated

ground, and in every respect a very healthy situation. Adjacent to it, and forming now a part of the town plat, is "*Shurtleff College, of Alton, Illinois,*" which bids fair to become an important and flourishing institution. Also "*Alton Theological Seminary,*" which has commenced operations. Both these institutions have been gotten up under the influence and patronage of the Baptist denomination. A female seminary of a high order, under the name of the "*Alton Female Institute,*" has been chartered, and a building is about to be erected for the purpose. The Baptists, Methodists and Presbyterians have congregations here, and two houses of worship are to be built the present year.

CHICAGO is the largest commercial town in Illinois. It is situated at the junction of North and South branches, and along the main Chicago, near its entrance into lake Michigan, on a level prairie; but elevated above the highest floods. A recent communication from a respectable mercantile house, giving the following statistics: "Fifty-one stores, 30 groceries, 10 taverns, 12 physicians, 21 attornies, and 4,000 inhabitants. We have four churches, and two more building, one bank, a Marine and Fire Insurance company about to go into operation, and a brick hotel, containing 90 apartments.

There were 9 arrivals and departures of steamboats in 1835, and 267 of brigs and schooners, containing 5,015 tons of merchandise and 9,400 barrels of salt, besides lumber, provisions, &c.

The harbor now constructing by the U. S. government, will be so far completed in 1836, as to admit vessels and steamboats navigating the lakes. A few miles back of Chicago are extensive tracts of wet prairie.

* GALENA is the seat of justiec for Jo Daviess county, situated on Fever river, in the midst of the mining district.

It has about 20 stores, a dozen groceries, and about 1,000 inhabitants.

SPRINGFIELD is near the geographical centre of the state, and in the midst of a most fertile region of country. It is a flourishing inland town, and contains about 2,000 inhabitants. JACKSONVILLE, the county seat of Morgan county, has about the same population, and is equally delightful and flourishing.

One mile west, on a most beautiful eminence, stands "*Illinois College*," founded under the auspices of the Presbyterian denomination, and bids fair to become a flourishing seat of learning.

We have not room to name, much less describe, the many growing towns and villages in this state, that excite and deserve the attention of emigrants. On the Illinois river are Ottawa, and several eligible sites in its vicinity, where towns have commenced; Beardstown, a short distance below the mouth of Sangamon river, Peoria, at the foot of Peoria lake, (a most beautiful site, and containing 1,000 inhabitants,) Meredosia, Naples, Pekin, Hennepin, &c. On the Mississippi, are Quincy, Warsaw, New Boston, and Stephenson, the seat of justice for Rock Island county. Interior, are Bloomington, Decatur, Tremont, Shelbyville, Hillsboro', Edwardsville, Carlyle, Belleville, Carrollton, and many others. Towards the Wabash, are Danville, Paris, Lawrenceville, Carmi, and Mount Carmel, the last of which has an importance from being connected with the grand rapids of the Wabash. Shawneetown is the commercial depot for the southeastern part of the state. On the Military Tract are Rushville, Pittsfield, Griggsville, Carthage, Macomb, Mammoth, Knoxville, Lewistown, Canton, &c., all pleasant sites, and having a population from two or three hundred to one thousand inhabitants.

For a more particular description of each county, town, and settlement, with all other particulars of Illinois, the reader is referred to "A GAZETTEER OF ILLINOIS.

Describe the projected internal improvements of Illinois?

The project of uniting the waters of lake Michigan and the Illinois, by a canal, was conceived soon after the commencement of the Grand canal of New York, and a Board of commissioners, with engineers, explored the route and estimated the cost, in 1823. Provision, by a grant of each alternate section of land within five miles of the route, having been granted by Congress, another Board of commissioners was appointed in 1829, a new survey was made, and the towns of Chicago and Ottawa laid off, and some lots sold in 1830. Various movements have since been made, but nothing effectually done, until the recent special session of the legislature, when an act was passed to authorize the Governor to borrow funds upon the faith of the state; a new Board of commissioners has been organized, and this great work is about to be prosecuted with vigor to its completion.

Funds, in part, have been provided, from the sales of certain saline lands belonging to the state, to improve the navigation of the Great Wabash, at the Grand Rapids, near the mouth of White river, in conjunction with the state of Indiana. From the same source, funds are to be applied to the clearing out of several navigable water-courses, and repairing roads, within the state.

Charters have been granted to several railroad companies, some of which have been surveyed and the stock taken. One from Alton to Springfield was surveyed in 1834, and the stock subscribed in December. Another from St. Louis, by the coal mines of St. Clair county, to Belleville, 13 miles, is expected to be made immediately. The project of a central railway from the termination of the Illinois and Michigan canal, at the foot of the rapids, a

few miles below Ottawa,—through Bloomington, Decatur, Shelbyville, Vandalia, and on to the mouth of the Ohio river, has been entered upon with spirit. Another charter contemplates the continuance of a route, already provided for in Indiana, and noticed under Ohio, from Lafayette, Indiana, by Danville, Shelbyville and Hillsboro', to Alton, the nearest point from the east to the Mississippi. A railroad charter was granted at a previous session of the legislature from Meredosia to Jacksonville, and another from Vincennes to Chicago.

We have only room to mention the following charters, which have been recently granted, in addition to those already specified :

One from Pekin to Tremont, in Tazewell county, 9 miles.

One from the Wabash, by Peoria to Warsaw, in Hancock county.

The Wabash and Mississippi railroad company.

The Mount Carmel and Alton railroad company.

The Rushville railroad company.

The Winchester, Lynville, and Jacksonville railroad company.

The Shawneetown and Alton railroad company.

The Pekin, Bloomington, and Wabash railroad company.

The Waverly and Grand Prairie railroad company.

The Galena and Chicago Union railroad company.

The Wabash and Mississippi Union railroad company.

The Mississippi, Carrollton and Springfield railroad company.

The *National Road* is in progress through this state, and considerable has been made on that portion which lies between Vandalia and the boundary of Indiana. This road enters Illinois at the northeast corner of Clark coun-

ty, and passes diagonally through Coles and Effingham counties in a southwesterly course to Vandalia, a distance of 90 miles. The road is established 80 feet wide, the central part 30 feet wide, raised above standing water, and not to exceed three degrees from a level. The base of all the abutments of bridges must be equal in thickness to one third of the height of the abutment.

The road is not yet placed in a travelling condition. The line of the road is nearly direct, the loss in 90 miles being only the 88th part of one per cent. Between Vandalia and Ewington, for 23 miles, it does not deviate in the least from a direct line.

Q. What is the state of Education in Illinois?

A. The same provision has been made for this as other western states, in the disposal of the public lands. The section numbered sixteen in each township of land, is sold upon petition of the people within the township, and the avails constitute a permanent fund, the interest of which is annually applied towards the expenses, in part, of the education of those who attend school, living within the township.

A school system, in part, has been arranged by the legislature. The peculiar and unequal division of the country into timber and prairie lands, and the inequality of settlements consequent thereupon, will prevent, for many years to come, the organization of school districts with *defined geographical boundaries*. To meet this inconvenience, the legislature has provided that any number of persons can elect three trustees, employ a teacher in any mode they choose, and receive their proportion of the avails of the school funds. *In all cases, however, the teacher must keep a daily account of each scholar who attends school, and make out a schedule of the aggregate that each scholar attends, every six months, and present it, cer-*

tified by the trustees of the school, to the school commissioner of the county, who apportions the money accordingly.

This state receives three per cent. on all the net avails of public lands sold in this state, which, with the avails of two townships sold, makes a respectable and rapidly increasing fund, the interest only of which can be expended, and that only to the payment of instructors.

Good common school teachers, both male and female, are greatly needed, and will meet with ready employ, and liberal wages. Here is a most delightful and inviting field for Christian activity. Common school, with Sunday school instruction, calls for thousands of teachers in the west.

Several respectable academies, are in operation, and the wants and feelings of the community call for many more. Besides the colleges at Jacksonville and Alton already noticed, others are projected, and several have been chartered. The Methodist denomination have a building erected, and a preparatory school commenced, at Lebanon, St. Clair county. The Episcopalians are about establishing a college at Springfield. One or more will be demanded in the northern and eastern portions of the state; and it may be calculated that, in a very brief period, the state of Illinois will furnish facilities for a useful and general education, equal to those in any part of the country.

Q. What are the Manufactures of Illinois?

A. In the infancy of a state, little can be expected in machinery and manufactures. And in a region so much deficient in water power as some parts of Illinois is, still less may be looked for. Yet Illinois is not entirely deficient in manufacturing enterprise.

Q. What amount of Lead is manufactured ?

A. The following table shows the amount of lead made annually from 1821 to Sept. 1835:

Lbs. of lead made from 1821, to Sept. 1823,	335,130
do. for the year ending Sept. 30, 1824,	175,220
do. do. do. 1825,	664,530
do. do. do. 1826,	958,842
do. do. do. 1827,	5,182,180
do. do. do. 1828,	11,105,810
do. do. do. 1829,	13,344,150
do. do. do. 1830,	8,323,998
do. do. do. 1831,	6,381,900
do. do. do. 1832,	4,281,876
do. do. do. 1833,	7,841,792
do. do. do. 1834,	7,971,579
do. do. do. 1835,	3,754,290
Total,	<hr/> 70,420,357

The rent accruing to government for the same period, is a fraction short of six millions of pounds. The government formerly received 10 per cent. in lead for rent. Now it is 6 per cent.

A part of the mineral land in the Wisconsin Territory has been surveyed and brought into market, which will add greatly to the stability and prosperity of the mining business.

Q. What is the state of Religion in Illinois ?

A. In general, there are as many professors of religion in proportion to the population, as in most of the states.

Q. What are the principal Church divisions in this State ?

A. The following table exhibits at one view the different religious denominations in Illinois.

DENOMINATIONS.	No. of Churches.	Ministers.	Members.
Presbyterians,	71	50	2,000
Methodist Episcopal,		61	15,097
Baptists,	240	163	6,741
Congregational,	3 or 4		
Cumberland Presby.	300	400	10,000
Methodist Protestants,		3	
Campbellites or Disciples,		7	400
Dunkards,	6		
Lutherans,	3	3	
United Breth. in Christ,	6		
Roman Catholics,	Few.		

Q. What is the History of Illinois?

A. The early settlements of the French along the Illinois and Mississippi rivers, date back to 1673. The distant and feeble establishments of that nation at any place within the chartered limits of Illinois, never arose to the dignity of colonies.

At the close of the revolutionary war, and by the treaty of 1783, the country was claimed under the charter of Virginia, and held by that state until ceded to the United States in 1787. It was then made a part of the territory northwest of the Ohio river.

When the now state of Ohio was made a separate territory in 1800, Illinois and Indiana remained united, and continued one territory; until 1809, when they were separated into two. Indiana lying eastward, and in the direction of the stream of emigration, preceded Illinois as a state; the former reached that dignity in 1815, and the latter in 1818, as may be seen by the date of her constitution. Since that epoch the history of the state merges in that of the United States.

Table of Distances in Illinois.

1. From Shawneetown to Bainbridge, Mo.		Miles,	Miles,	5. From Salem to St. Louis, Mo.		Miles,	Miles,
To Vienna,	40			To Vandalia,	26		
Mount Pleasant,	10	50		Greenville,	20	46	
Jonesboro',	10	60		Hickory Grove,	10	56	
Bainbridge, Mo.	10	70		Edwardsville,	25	81	
				St. Louis, Mo.	22	103	
2. From Shawneetown to St. Louis, Mo.				6. From Vandalia to Galena.			
To Equality,	10			To Hillsboro',	28		
Curran,	19	29		Macaupin Point,	23	51	
Frankfort,	16	45		Springfield,	28	79	
Nashville,	46	91		Peoria,	66	145	
Belleville,	34	125		Dixon's Ferry,	99	244	
St. Louis, Mo.	15	140		Galena,	61	305	
3. From Vincennes, In., to St. Louis, Mo.				7. From Vincennes, In., to Danville.			
Lawrenceville, Il.,	10			To Palestine, Il.,	25		
Maysville,	40	50		York,	15	40	
Salem,	37	87		Darwin,	10	50	
Carlyle,	25	112		Paris,	26	76	
Lebanon,	29	141		Bloomfield,	14	90	
Belleville,	12	153		Georgetown,	16	106	
St. Louis, Mo.	15	168		Danville,	14	120	
4. From Shawneetown to Vandalia.				8. From St. Louis to Springfield, via Carrollton.			
To Equality,	10			To Lower Alton,	20		
Moore's Prairie,	43	53		Carrollton,	40	60	
Mount Vernon,	14	67		White Hall,	14	74	
Walnut Hill,	18	85		Manchester,	9	83	
Carlyle,	17	102		Jacksonville,	11	94	
Vandalia,	30	132		Berlin,	21	115	
				Springfield,	15	130	

9. <i>From St. Louis to Springfield, via Carlinville.</i>		Miles,	Miles			Miles,	
Edwardsville, Il.	22			Upper Alton,		2	33
Carlinville,	40	62		St. Charles, Mo.		28	61
Macaupin Point,	24	86		—			
Springfield,	28	114					
—							
10. <i>From Belleville to St. Charles, Mo.</i>		Miles,	Miles	11. <i>From Vincennes, In., to St. Louis, Mo., via Vandalia.</i>		Miles,	
To Collinsville,	11			To Salem, as in		87	
Edwardsville,	8	19		No. 3,		26	113
Lower Alton,	12	31		Vandalia,			
				St. Louis, as in No.		77	190
				5,			

MICHIGAN.*

Q. How is Michigan bounded, and how many Square miles and acres does it contain?

A. Michigan is bounded on the north by the straits of Mackinaw; east by lakes Huron, St. Clair and Erie, and their waters; south by Ohio and Indiana; and west by lake Michigan. It contains 40,000 square miles, and about 26,000,000 acres. There are no mountains in this state.

Q. Which are the principal rivers and lakes?

A. The northern tributaries of the Maumee, Raisin, Huron, Grand, Rouge, Detroit, Clinton, Bell, Pine, Black, St. Clair, Saginaw, Tittibawassee, Hare, Shiawassee, Flint, Cass, Traverse, Ottawa, Betsy, Manistic, Pent, White, Maskegon, Kekamalazoo, St. Joseph, and a few others. For a full description of the sources and meandrings of the several rivers, we would refer the reader to *Beck's Emigrants' Guide*, page 180-184.

Describe the soil and surface.

It is generally a level country, having no mountains and not many elevations that might properly be called hills. The centre of the peninsula is table land; elevated, however, not many feet above the level of the lakes, and

* For want of space, we have to compress the description of Michigan and Missouri.

s'loping inward; still the surface is undulating. A few miles back of Detroit is a flat wet country for some considerable extent; for Michigan abounds with small lakes and ponds.

Q. What are the natural productions?

A. The timber consists of all the varieties in the western states; such as oaks of various species, walnut, hickory, maple, poplar, ash, beech, white and yellow pine, &c.

Q. How is the climate?

A. In consequence of the country being level and peninsular, and surrounded on all sides but the south, with immense bodies of water, it is more temperate and mild than could be expected from its latitude. The southern parts have mild winters, and the spring opens as early as in any part of the United States, in the same latitude.

Give an outline of the Constitution of this state.

A convention assembled at Detroit, on the 11th of May, 1835, and framed a constitution for a state government, which was submitted to, and ratified by a vote of the people on the first Monday in October.

The powers of the government are divided into three distinct departments:—the legislative,—the executive,—and the judicial.

The legislative power is vested in a *Senate* and *House of Representatives*. The representatives are to be chosen annually; and their number cannot be less than 48, nor more than 100.

The senators are to be chosen every two years, one half of them every year, and to consist, as nearly as may be, of one third of the number of the representatives.

The census is to be taken in 1837, and 1845, and every ten years after the latter period; and also after each census taken by the United States, the number of senators and representatives is to be apportioned anew among the sev-

eral counties, according to the number of white inhabitants.

The *legislature* is to meet annually, on the first Monday in January.

The executive power is to be vested in a governor, who holds his office for two years. Upon a vacancy, the lieutenant governor performs executive duties. The first election was held on the first Monday in October, 1835, and the governor and lieutenant governor hold their offices till the first Monday in January, 1838.

The *judicial power* is vested in one *Supreme Court*, and in such other courts as the legislature may, from time to time, establish. The judges of the Supreme Court are to be appointed by the governor, with the advice and consent of the senate, for the term of seven years. Judges of all county courts, associate judges of circuit courts, and judges of probate, are to be elected by the people for the term of four years.

Each township is authorized to elect four justices of the peace, who are to hold their offices for four years. In all elections, every white male citizen above the age of 21 years, having been a resident six months next preceding any election, is entitled to vote at such election.

Slavery, lotteries, and the sale of lottery tickets, are prohibited.

The seat of government is to be at Detroit, or such other place or places as may be prescribed by law untill the year 1847, when it is to be permanently fixed by the legislature.

Q. What can you say of the population of this state?

A. In 1834, there were 31,346 white; 261 free colored; 32 slaves, making a total of 31,639. In 1835, the population was 85,856; at present, no doubt, it exceeds 100,000.

Q. Into how many counties is this state divided?

A. In 1835, this state had been divided into no less than 33 counties, some of which were attached to adjacent counties for judicial purposes.

The following tabel gives us at one view, the names of counties, population, seats of justice, &c.

COUNTIES.	Population.	SEATS OF JUST.	Dist. from Detroit.
Berrian, - - - - -	1,787	Berrian, - - - - -	180
Branch, - - - - -	764	Branch, - - - - -	133
Calhoun, - - - - -	1,714	Eckford, - - - - -	100
Cass, - - - - -	3,280	Cassopolis, - - - - -	160
Jackson, - - - - -	1,865	Jacksonsburgh, - - - - -	77
Kalamazoo, - - - - -	3,124	Bronson, - - - - -	137
Lenawee, - - - - -	7,911	Tecumseh, - - - - -	63
Macomb, - - - - -	6,055	Mount Clemens, - - - - -	25
Monroe, - - - - -	8,542	Monroe, - - - - -	36
Oakland, - - - - -	13,844	Pontiac, - - - - -	26
St. Clair, - - - - -	2,244	St. Clair, - - - - -	60
St. Joseph, - - - - -	3,168	White Pigeon, - - - - -	135
Washtenaw, - - - - -	14,920	Ann Arbor, - - - - -	42
Wayne, - - - - -	16,638	Detroit, - - - - -	
<i>Total,</i> 85,856			

The other counties are Hillsdale, Van Buren, Allegan, Barry, Eaton, Ingham, Livingston, Lapeer, Genessee, Shiawassee, Clinton, Ionia, Kent, Ottawa, Oceana, Gratiot, Isabella, Midland, Saginaw, Sanilac, Gladwin and Arenac, the population of which are included in the counties given in the table.

The counties are subdivided into incorporated townships, for local purposes, the lines of which usually correspond with the land surveys.

For the sales of public lands, the state is divided into three land districts, and land offices are established at Detroit, Monroe, and Bronson.

Describe the chief towns.

DETROIT is the commercial and political metropolis. It is beautifully situated on the west side of the river Detroit, 18 miles above Malden in Canada, and 8 miles below the outlet of lake St. Clair.. A narrow street, on which the wharves are built, runs parallel with the river. After ascending the bench or bluff, is a street called Jefferson Avenue, on which the principal buildings are erected. The older dwellings are of wood, but many have been recently built of brick, with basements of stone, the latter material being brought from Cleveland, Ohio. The primitive forest approaches near the town.

The public buildings of Detroit, are a state house, a council house, an academy, and two or three banking houses. There are five churches for as many different denominations, in which the Episcopalians, Presbyterians, Baptists, Methodists, and Roman Catholics worship. The Catholic congregation is the largest, and they have a large cathedral. Stores and commercial warehouses are numerous, and business is rapidly increasing. Town lots, rents, and land property in the vicinity are rising rapidly. Lots have advanced, within two or three years, in the business parts of the city, more than one thousand per cent. Mechanics of all descriptions, and particularly those in the building line, are much wanted here, and in other towns in Michigan. The population is supposed to be about 10,000, and is rapidly increasing. This place commands the trade of all the upper lake country.

MONROE, the seat of justice for Monroe county, is situated on the right bank of the river Raisin, opposite the site of old Frenchtown. Two year since, it had about 150 houses, of which 20 or 30 were of stone, and 1600 inhabitants. There were also two flouring and several saw-mills, a woolen factory, an iron foundry, a chair factory, &c., and an abundant supply of water power. The "Bank

of the River Raisin," with a capital of \$100,000, is established here. The Presbyterians, Episcopalians, Baptists, Methodists, and Roman Catholics have houses of worship and ministers here. It was at this place, or rather at Frenchtown in its vicinity, that a horrible massacre of American prisoners took place during the last war with Great Britain, by the Indians under Gen. Proctor. The sick and wounded were burned alive in the hospital, or shot as they ran shrieking through the flames!

Of the 700 young men barbarously murdered here, many were students at law, young physicians, and merchants, the best blood of Kentucky.

Mount Clemens, Brownstown, Ann Arbor, Pontiac, White Pigeon, Tecumseh, Jacksonsburgh, Niles, St. Josephs, &c., are pleasant villages and are increasing rapidly in population, &c.

Q. What are the Internal Improvements?

A. A survey has been made for a railroad across the peninsula of Detroit, through the counties of Wayne, Washtenaw, Jackson, Calhoun, Kalamazoo, Van Buren, and Berrian, to the mouth of St. Joseph River. Another project is to commence at or near Toledo on the Maumee river, and pass through the southern counties of Michigan into Indiana, and terminate at Michigan city. A third project is to open a water communication from the navigable waters of Grand river, to Huron river, and, by locks and slack water navigation to lake Erie.

Q. What is the state of Agriculture?

A. This is slowly improving. The principal products raised are corn and wheat which grow luxuriantly. Rye, oats, buckwheat, potatoes, and all garden vegetables common to the western states grow well. All grasses grow well.

Q. What is the state of education?

A. Congress has made the same donations of lands, as

to other western states, and will, doubtless, appropriate the same per centage on the sales of public lands, when the state is admitted into the Union, as has been appropriated to the other new states.. A respectable female academy is in operation at Detroit. The Presbyterian denomination are about establishing a college at Ann Arbor, the Methodists a seminary at Spring Arbor, the Baptists one in Kalamazoo county, and the Roman Catholics, it is said, have fixed their post at Bertrand, a town on the St. Joseph river, in the southeastern corner of Berrian county, and near to the boundary line of Indiana. Much sentiment and feeling exists in favor of education and literary institutions, amongst the people.

Q. What can you say of Religion and the various denominations?

A. The Methodists have 11 preachers and 675 members; the Presbyterians 32 churches and 20 ministers; the Episcopalians 15 ministers; the Baptists 60 churches, and 60 ministers, and 1700 members; the Roman Catholics have 1 bishop, 18 priests, 3,500 of population.

Q. What can you say of the history of Michigan?

A. The first civilized settlements in Michigan were made by the French from Canada; and Detroit was founded about 1670; but this region so remote from the Atlantic coast, was peopled slowly, and at the end of the revolutionary war, when ceded to the United States by the treaty of Paris, contained but few inhabitants. Under various pretences, the British colonial agents retained Detroit, with all that is now Michigan, until after the treaty of Greenville, and the United States did not obtain the country in actual possession until 1796. The territory of Michigan was formed in 1805. The country had to sustain more than a share of the vicissitudes of the last war between the United States and Great Britain, and was, in 1812, actually overrun by the troops of the latter; but in

the ensuing year was retaken by an army of the United States under General Harrison. Relieved from calamities of war, and laid open to Atlantic commerce and emigration by the great western canal of New York, the advance of Michigan has been rapid. By the census of 1820, it contained but 8,896 inhabitants, but as shown in 1830, the population was 31,639; the inhabitants now, 1836, exceed 100,000.

On the 17th July, 1822, Colonel Brady founded Fort Brady on the straits of St. Mary, and commenced the settlements of Chippeway county. The settlements on the peninsula are spreading with great rapidity, as may be seen by the numerous counties formed since the census of 1830 was taken.

In 1835 a constitution was framed for the state and ratified by the people. In 1836, Michigan was admitted into the Union as a state.

Table of Distances in Michigan.

1 From Lower Sandusky to Detroit, M. T.		Miles,			Miles,	Miles,
To Perrysburg,	32		Adrian,	12	42	
Maumee,	1	33	Tecumseh.	10	52	
Port Lawrence,	10	43				
Monroe,	18	61				
Brownstown,	18	79				
Monguagon,	4	83	3 From Detroit to			
DETROIT,	19	102	Chicago.			
			To Lafayette,	12		
			Ypsilanti,	20	32	
			Jonesville,	68	100	
			Coldwater,	20	120	
			Sturges' Prairie,	25	145	
			Mottville,	17	162	
			Edwardsburg,	22	184	
			South Bend, In.	16	200	
			Chicago,	92	292	
2 From Monroe to Tecumseh.		Miles,				
To Atkinson,	7					
Raisinville,	4	11				
Summerfield,	5	16				
Blissfield,	14	30				

MISSOURI.

Q. What are the boundaries, &c. of the State of Missouri?

A. Missouri is bounded by Des Moines country, attached to Wisconsin Territory, east by the Mississippi river, south by the Arkansas Territory, and west by the Indian Territory. It contains 64,500 square miles, and 41,280,000 acres.

Q. What can you say of the population?

A. In 1820, there was a population of 66,586; in 1830, 148,555; in 1836, (estimated for January,) 210,000.

Q. Are there any mountains in Missouri?

A. There are, properly speaking, no mountains. The surface of this state is greatly diversified.

Name some of the principal rivers.

Besides the great rivers Mississippi and Missouri, this state is watered by various other streams of magnitude; as the Osage which is navigable 660 miles for boats; the Grand, Chariton, Gasconade, Merrimac, Washita, St. Francis, Kankas, Lemoine. &c.

Describe the soil.

A great portion of the land is of the richest kind. The land bordering on the Missouri are exceedingly rich. They consist of a stratum of black alluvial soil of unknown depth. As you recede from the banks of the rivers, the land rises, passing sometimes gradually, and

sometimes abruptly into elevated barrens, flinty ridges, and rocky cliffs; so that a portion of the state is unfit for cultivation.

Q. What Minerals abound in this State?

A. Various kinds, as lead, iron, coal, gypsum, zinc, manganese, antimony, cobalt, ochre of various kinds, common salt, plumbago, porphyry, jasper, marble, chalcodony, barrstone, freestone, &c. There is iron ore enough in Missouri to supply the whole United States.

Describe the Climate.

The climate is remarkably serene and temperate, and very favourable to health.

Q. What can you say of the Constitution of Missouri?

A. The constitution, which was formed at St. Louis, in 1820, is similar to that of Illinois, in its broad features, excepting the holding of slaves is allowed, and the General Assembly has no power to pass laws for the emancipation of slaves, without the consent of their owners, or paying an equivalent. It is made the duty of the General Assembly "to oblige the owners of slaves to treat them with humanity, and to abstain from all injuries to them extending to life or limb." "Slaves shall not be deprived of an impartial trial by jury."

In 1832, there were in the state, 32,184 slaves, and 661 free coloured persons.

Every free white male citizen has the right of suffrage, after residing in the state one year.

Q. What are the civil divisions of Missouri?

A. It is divided into 50 counties, as follows:—Barry, Benton, Boone, Callaway, Cape Girardeau, Carroll, Chavilton, Clay, Clinton, Cole, Cooper, Crawford, Franklin, Gasconade, Green, Howard, Jackson, Jefferson, Johnson, La Fayette, Lewis, Lincoln, Madison, Marion, Monroe, Montgomery, Morgan, New Madrid, Perry, Pettis, Pike,

Polk, Pulaski, Randolph, Ralls, Ray, Ripley, Rives, St. Francois, St. Genevieve, St. Charles, St. Louis, Saline, Scott, Shelby, Stoddart, Van Buren, Warren, Washington, and Wayne.

Describe the principal Towns.

JEFFERSON CITY, in Cole county, is the political capitol of the state, on the right bank of the Missouri, immediately above Wier's creek, and a few miles above the Osage, and about 138 miles from St. Louis. The town is but small, and scarce any business done in the place, except some state business. It contains besides private houses, a governor's house, the state house, and a penitentiary.

ST. LOUIS is the metropolis and commercial capital, and the most important place in all this portion of the "*Great Mississippi Valley*." It is on the western bank of the Mississippi, 180 miles above the junction of the Ohio, 18 miles below that of the Missouri, 38 miles below that of the Illinois, and 1,200 above New Orleans, by the course of water.

It is beautifully situated on ascending and elevated ground, which spreads out into an undulating surface to the west for many miles. Two streets are parallel with the river on the first bank, and the rest of the city stands on the second bank; but very little grading is necessary, to give the streets running back from the river, their proper inclination. The old streets, designed only for a French village, are too narrow for public convenience, but a large part of the city has been laid out on a liberal scale.

The Indian and Spanish trade, the fur and pelty business, lead, government agencies, army supplies, surveys of government lands, with the regular trade of an extensive interior country, makes St. Louis a place of great

business, in proportion to its population, which is about 10,000.

The morality, intelligence and enterprize of this city is equal to any other in the West, in proportion to its size. The American population is most numerous, but there are many French, Irish and Germans.

About one-third of the inhabitants are Roman Catholics. The Presbyterians, Methodists, and Episcopalians have large congregations and houses of worship. The Baptists and Unitarians are rather small, and without public edifices. The Roman Catholic cathedral is a costly pile of buildings of freestone, and has a splendid chime of bells, sent over from Europe. St. Louis is a pleasant and healthy situation, and surrounded with a fertile country.

Cape Girardeau is a commercial depot for the southern part of the state.

St. Genevieve stands a little back from the river, and is known only as an old French village.

Selma is a landing and depot for the lead mine country, 33 miles below St. Louis.

Clarksville, *Hannibal*, *Saverton*, and *La Grange* are commercial sites on the Mississippi, above the mouth of Missouri.

Palmyra is a beautiful town, of about 1,000 inhabitants, and the seat of justice for Marion county.

Along the Missouri are *Portland*, *Rocheport*, *Boonville*, *Lexington*, *Independence*, and many other places of various degrees of importance. *Franklin* formerly stood on the north bank of Missouri, but most of it has been removed three miles interior, to the bluffs.

Potosi is a central town in the mineral district.

Fulton, *Columbia*, and *Fayette* are the seats of justice for *Callaway*, *Boone*, and *Howard* counties, and are pleasant and flourishing towns.

Q. What are the Internal Improvements ?

A. There are few. The citizens of St. Louis, very recently have entered upon a project of a railroad from that city, through the heart of this country, to the fine farming lands in the south-western part of the state. If this project be carried out, it will be beneficial to the state.

Q. What is the state of Education ?

A. Similar provisions have been made as in other western states; and there is a strong disposition to encourage common schools and sustain academies.

St. Louis University was founded in 1829, and is conducted by the Fathers of the Society of Jesuits.

There is another institution at a place called Bois Brule Bottom, in the southern part of the state, both Catholic institutions. There is also a college at Marion.

Q. What can you say of the principal Religious Denominations?

A. The Baptists in this state have 180 churches, 115 ministers, 6,990 communicants; the Methodists have 57 ministers, 7,958 white members, 1,061 coloured, and 889 Indians,—*in toto* 9,893; the Presbyterians have 33 churches, 20 ministers, 1,549 members; the Roman Catholics have a host of priests, and many chapels; the Episcopalians have 5 or 6 ministers.

Q. What is the early History of Missouri?

A. The whole country now included in the states of Alabama and Mississippi, was held by France, or more correctly, that nation claimed this region as a part of Louisiana, from their first settlement on the northern shores of the Gulf of Mexico.

In 1716, the French formed a settlement amongst the Natchez Indians, and built a fort where the city of Natchez now stands. In the first instance, the Indians were unaware of the consequence, but dissatisfaction soon arose, and ended, in 1723, in open war.

Bienville, the governor-general, marched a force from New Orleans to Natchez, which the Indians were unable to oppose, and were compelled to submit to terms.

In 1729, a man of the name of Chopart was commandant at Natchez; but his injustice and folly so exasperated the natives, and at the same time neglecting the means of defending his colony against their wrath, a massacre was planned, and on the 30th of November, 1729, perpetrated; when, with two or three exceptions, the French of both sexes, to the amount of 700, fell victims. The total dispersion of the Natchez nation soon followed, as they were too weak to sustain themselves against the French.

The country in the vicinity of Natchez was abandoned by both whites and Indians, and remained long uninhabited. The French still, however, claimed the country until 1763, when it was ceded as part of Florida to Great Britain.

Settlers slowly entered the country, and many very respectable British families located themselves in and near Natchez. During the revolutionary war, 1781, Governor Galvez, of Louisiana, invaded and conquered West Florida, and by the treaty of Paris, 1783, it fell once more to Spain, who held it until 1793, when it was given up to the United States.

The 9th of July, 1803, an act of Congress was passed to admit a delegate from Mississippi territory into Congress. June 17th, the assent of Georgia demanded to the formation of two states from the Mississippi territory. Georgia acceded to the demand, but the country remained a territory until December 1817. Previous to the latter date, on the 21st of January, 1815, a petition from the Legislature of the Mississippi territory, praying admission into the Union as a state. This petition was favourably reported on by a committee of Congress, December, 1816. An act was passed the 1st of March, 1817, authorizing the people

of the petitioning territory to call a Convention, which was called, and met in July, 1817. The Convention accepted the act of Congress, and proceeded to frame a Constitution of government. The Constitution was adopted on the 15th of August, and in the ensuing December was confirmed by Congress, and the new state took her station as a member of the Union.

Table of Distances in Missouri.

		Mis.	Mis.			Mis.	Mis.
1. <i>From St. Louis to Palmyra.</i>							
To Waltondam,		6		Greenville,		55	67
St. Charles,		14	20	Hix's Ferry, A. T.		56	123
Troy,		37	57	Columbia,		16	139
Auburn,		16	73	Jackson,		14	153
Bowling Green,		16	89	Batesville,		50	203
Frankford,		11	100	Little Red River,		33	236
New London,		12	112	Little Rock,		67	303
Hannibal,		8	120				
Palmyra,		10	130				
				5. <i>From Jackson to St. Louis, Mo.</i>			
2. <i>From St. Louis to Fayette.</i>				To Perryville,		27	
To St. Charles,		20		Kaskaskia, Il.		23	50
Stockland,		10	30	Waterloo,		34	84
Lewistown,		45	75	Columbia,		9	93
Fulton,		35	110	St. Louis, Mo.		19	112
Millersburg,		10	120				
Columbia,		14	134	6. <i>From Fayette to Independence.</i>			
Franklin,		26	160	To Chariton,		14	
Fayette,		13	173	Walnut Farm,		7	21
				Petitsaw Bluff,		30	51
3. <i>From St. Louis to Jefferson Barracks,</i>		10		Lexington,		23	74
				Pleasant Grove,		14	88
				Independence,		25	113
4. <i>From Bainbridge, Mo. to Little Rock, A. T.</i>				7. <i>From Jefferson City to Fulton.</i>			
To Jackson,		12		To Hibernia,		1	
				Fulton,		22	23

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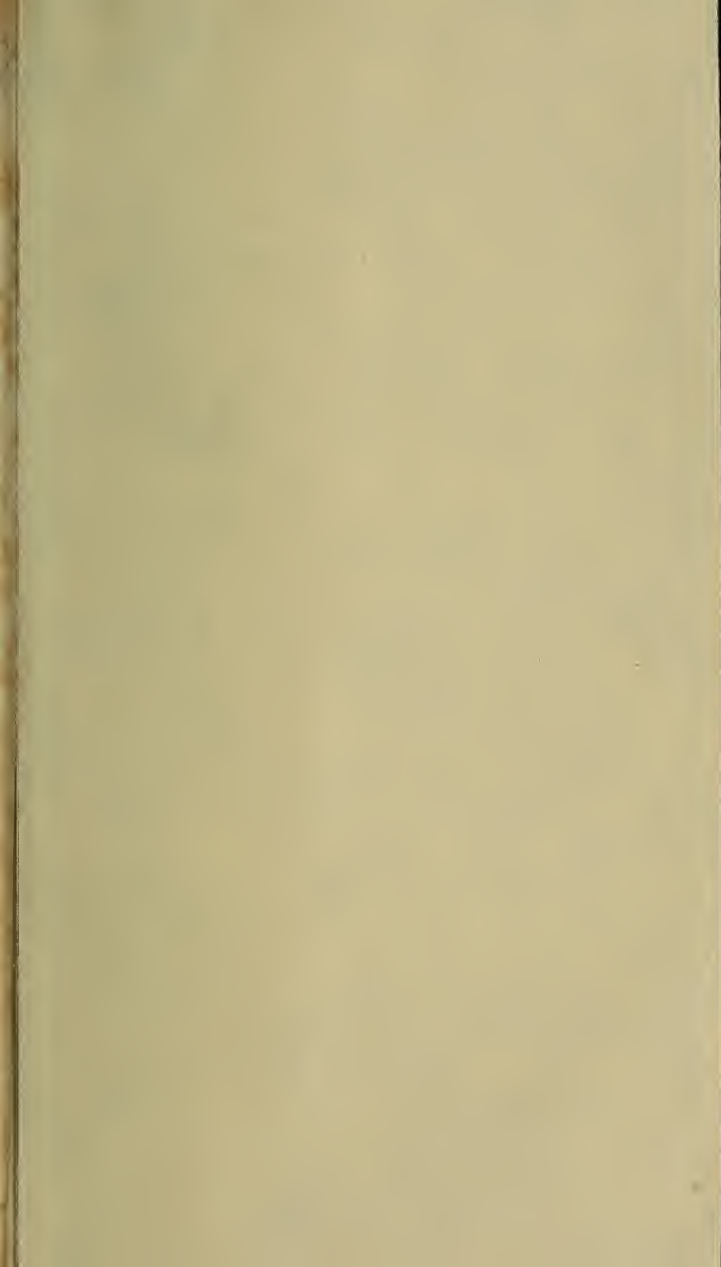
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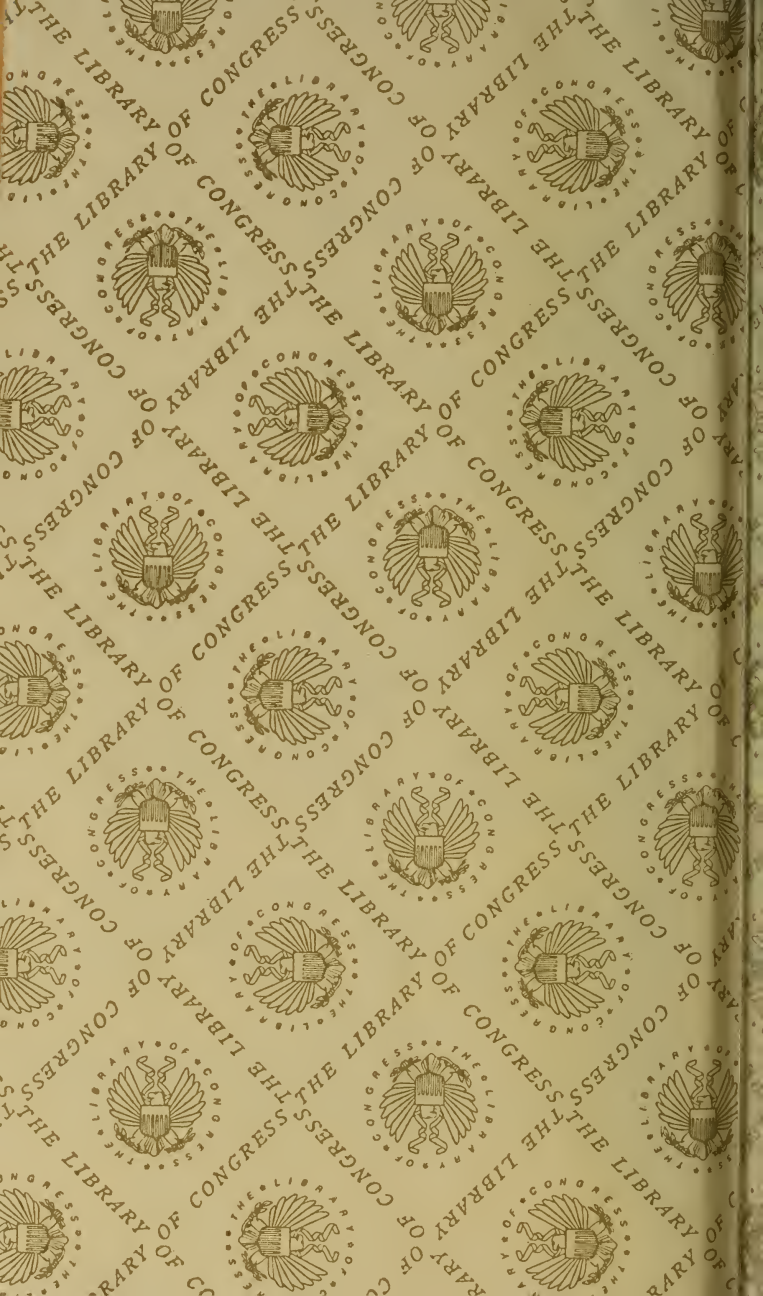
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